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ANIMAL EXPLOITATION IN PREHISTORIC SOUTHEASTERN IRAN: FAUNAL REMAINS FROM TEPE YAHYA AND TEPE GAZ TAVILA-R37, 5500-3000 BC

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Animal Exploitation in Prehistoric Southeastern Iran: Faunal Remains from Tepe Yahya and Tepe Gaz Tavila-R37, 5500-3000 BC

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Date 10 October 1986

Animal Exploitation in Prehistoric Southeastern Iran

Faunal Remains From Tepe Yahya and Tepe Gaz Tavila-R37

5500-3000 BC

A thesis presented

by

Richard Henry Meadow

to

The Department of Anthropology

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

in the subject of

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ABSTRACT

Some 19,000 bones of mammals and birds were studied from two archaeological sites in southeastern Iran, Tepe Gaz Tavila-R37 and Tepe Yahya, with a view toward documenting prehistoric animal exploitation practices at village sites in that little known part of the Middle East for the period 5500-3000 BC. Particular attention was paid to metrical data on animal size and to evidence on age and sex in order to document husbandry practices. The principal domestic species identified were goats (domestic and some wild: *Capra hircus* and *Capra aegagrus*), sheep (domestic and some wild: *Ovis aries* and *Ovis orientalis*), and cattle (some wild *Bos primigenius* ssp, and probably two forms of domestic: *Bos taurus* and *Bos indicus*). The domestic dog (*Canis famialiaris*) is also attested.

The assemblages are dominated by the remains of caprines and especially of domestic goats. The bones of domestic sheep appear to make up a consistent 20-30 percent of the collections for all periods while the percentages for goats and cattle vary widely. Of particular interest is evidence for zebu cattle which was identifiable on the basis of a bifid vertebra and pieces of the skull. Considerable cattle breeding may have been taking place including the crossing of wild and domestic stock and even the importation from the west, toward the end of the 4th millenium, of smaller, (?)taurine, animals. A very few pigs may have been kept, although boar (*Sus scrofa*) was also hunted along with a wide range of other animals including various birds, tortoises, lion,

black bear, and especially gazelle that could be identified as *Gazella bennetti*.

Also examined at the two sites were the relationships between faunal change through time and variation through contextual space. Although no firm conclusions were reached, it is apparent that the nature of the faunal remains varied with context type both in taxonomic composition and in the nature of the fragments preserved. Rank order correlations of skeletal part profiles indicate distinct patterning in element distributions for medium mammals but much less patterning for large mammals.

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Dedicated

to

all of my family but especially

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LEM

AEM

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Many people have suffered during the inordinate amount of time it has taken to put this thesis together. Chief among them have been my nuclear family: Deyne, Lela, Ashok, and my extended family: Henry, Mary, Patricia; they have largely suffered in silence, however, and by this passive act as well as by innumerable active acts of support have helped me through to the end. Likewise, I am grateful to my two mentors: Barbara Lawrence (fauna) and C.C. Lamberg-Karlovsky (archaeology) for their patience, active encouragement, and assistance. The other member of my thesis committee, K.-C. Chang, has also provided encouragement throughout as have Jean-Francois and Catherine Jarrige, George and Barbara Dales and, especially, Marielle Santoni.

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Chapter 1

INTRODUCTION

> How do we sieze the past? Can we ever do so? When I was a medical student some pranksters at an end-of term dance released into the hall a piglet which had been smeared with grease. It squirmed between legs, evaded capture, squealed a lot. People fell over trying to grasp it, and were made to look ridiculous in the process. The past often seems to behave like that piglet.
>
> (Julien Barnes: Flaubert's Parrot, pg. 14)

Attempting to capture a greased piglet is a particularly appropriate analogy for trying to illuminate aspects of the past using faunal remains from archaeological sites. Only in exceptional cases can straightforward answers to non-trivial questions be obtained from this type of debris and, as in any field of enquiry, the nature of the questions asked determine the kinds of "truth" eventually captured. In the first two-thirds of this century, expectations, particularly in North America, were minimal and often met in a satisfactory fashion by a list of animal species identified from their remains at a site. This is no longer the case. Elaborate questions (often termed "hypotheses") are

generated and answers sought in ("tested by") patterns developed through the analysis of faunal materials. The causes of such patterning, however, are usually difficult to ascertain in an unequivocal fashion, the problem of equifinality being especially acute for this class of materials.

The particular configuration of a set of animal bone data is determined by cultural and taphonomic factors as well as by features of recovery and analysis. Thus, while we may be most interested in investigating choices made in the past about what to consume or what animals to keep, the picture that we get will be affected by patterns of bone deposition and preservation as well as by procedures of excavation and choices made by the analyst (e.g., Meadow 1976, 1980). As much of the structure of faunal data is limited to variations on a restricted set of biological phenomena, similar patterns can more easily be produced by different activities, cultural and non-cultural alike, than is the case for other classes of archaeological materials for which possible variation is less restricted.

For example, an animal has a limited and well-defined skeletal configuration. Deviation from this configuration exhibited by an analyzed collection might be explicable by cultural procedures of butchery and meat distribution, but similar patterns might also be expected given the activities of scavengers and other post-depositional agents. A primary focus for consideration of such factors in archaeology has been Early Man studies (e.g., Behrensmeyer and Hill 1980, Binford 1981, Brain 1981) although awareness of taphonomic forces can be found in faunal studies from all times and places. Particularly

detailed discussions for sites in the Middle East have been those of Gilbert (1979) for Godin Tepe (northwestern Iran, third-first millennia BC) and Meadow (1978a) for Hajji Firuz Tepe (northwestern Iran, sixth millennium bc). ("BC" denotes calendar years before the Christian era, while "bc" denotes radiocarbon years, 5730 half-life, unless otherwise noted.)

When, in 1971, I first set out to analyze the collection of animal bone remains from Tepe Yahya (southeastern Iran, sixth millennium BC - first millennium AD: see Chapter 2), the possibility of having to try to catch a "greased piglet" was far from my mind. Faunal analysis seemed to involve straightforward application of well-defined methods to obtain answers to a set of questions concerning ancient environments and animal utilization. In my application to the National Science Foundation for a dissertation improvement grant (awarded as Grant No. GS-31960 to C.C. Lamberg-Karlovsky), I proposed to partially excavate a third millennium BC site in the Halil Rud drainage east of Tepe Yahya (see Chapter 2) in order to recover material suitable for comparing animal utilization at two contemporary and comparably sized but differently situated settlements. Permission for the excavations at Tepe Nurabad was not forthcoming, however, with the result that funds from the grant were used to assist Martha Prickett with the excavation of the sixth millennium BC site of Tepe Gaz Tavila-R37 located in the Shah Maran-Daulatabad basin to the west of Tepe Yahya (see Chapter 2). Because of this unavoidable change of plan, the decision was made to compare faunal materials from period VII at Tepe Yahya with those from contemporary Gaz Tavila and also to examine change through time in

animal utilization at Tepe Yahya (south side excavations) from the late sixth through the late fourth millennia BC (Yahya periods VII through IVC, see Chapters 2 and 7).

Again the task seemed straightforward, but it turned out to be otherwise. Although there is a more or less continuous sequence of occupation at Tepe Yahya for the periods involved (with the exception of a temporal gap between periods VA and IVC), the natures of the architectural remains and activity zones uncovered in the excavated areas were found to differ greatly. As has been demonstrated in a number of studies (e.g., Meadow 1978a, Maltby 1979), the composition of a faunal assemblage can be expected to vary according to the nature of the context from which it is recovered. For example, material from inside a structure is likely to have different skeletal part and species composition profiles than that found in what were probably alleys and streets, while the nature of material from fill deposited outside of a settlement will differ from that found within an inhabited area. Thus an attempt had to be made to define and compare contextual as well as temporal units (see Chapters 6 and 7). Even when faunal remains from similar contextual units could be isolated for comparison, however, resulting assemblage sizes were found to vary greatly and some contextual units are not even represented within a given temporal unit. Both of these phenomena are obvious in the tables that pertain to Chapter 7. Nevertheless in Chapter 8 an attempt is made to discern and explicate some patterns of variation in distribution of medium and large mammal remains, bone fragmentation, bone modification, and skeletal part distributions through time and between context types.

In contrast to Chapter 7 where the faunal remains are discussed within their archaeological context, in Chapters 4 and 5 salient zoological aspects of the Gaz Tavila and Yahya collections are presented on a taxon-by-taxon basis, and an attempt is made to discern patterns of change in the exploitation of individual taxa through time. One may argue that these discussions might better have come after consideration of the various taphonomic processes and contextual patterns alluded to in Chapters 7 and 8. In many senses this objection is valid, yet an attempt to place the material of Chapters 7 and 8 before that of Chapters 4 and 5 proved unsatisfactory to me because it became clear that what had to be done was to first define patterns of animal exploitation as reflected in the faunal assemblages and then to evaluate those patterns based on temporal and spatial variations in measures of bone preservation and modification. An attempt at such an evaluation is included in Chapters 8, although that chapter is more a summary of outstanding problems than a true conclusion.

Part of the process of documenting the faunal remains from Tepe Gaz Tavila-R37 and Tepe Yahya was the taking of a comprehensive series of measurements on bones and teeth. These are included here as Appendix 2 and their evaluation makes up significant parts of both Chapters 4 and 5. Unlike data on kill-off patterns, measurement data are less severely affected by taphonomic factors as post-cranial dimensions are usually taken only on specimens that manifest epiphyseal union. As it is unfused bones that appear to be most severely affected by destructive forces and these bones are not measured, differential preservation should be less of a problem than when investigating kill-off patterns.

Unfortunately, however, numbers of measureable specimens were small for any given taxon in any given temporal unit and thus it was not possible to deal with animal size on an element by element basis. Instead, measurements for all skeletal parts had to be grouped within temporal units and compared to a standard (see Chapter 4). This approach involves various assumptions about allometry and also makes differential representation of individual skeletal parts more of a problem than it might have been if sufficient numbers of individual elements had been recovered. But one can also argue that dealing with the various skeletal parts together will serve to cancel out the potential effects of skewed distributions of individual elements. In brief, dealing with measurement data was found not to be any more straightforward than dealing with other types of faunal data.

To sum up the organization of this work, following this introductory Chapter 1 is a chapter (2) briefly describing the archaeological sites of Tepe Gaz Tavila-R37 and Tepe Yahya, the history of their excavation, and their geographic settings. Chapter 3 presents the methods used to analyze the faunal collections while the next two chapters provide discussion of the various taxa identified, taxon by taxon, Chapter 4 dealing with all taxa except the bovids which are considered in Chapter 5. Chapter 6 includes an explication of the recording system for excavation units as well as definitions of the contextual units used in Chapter 7 for presentation of the faunal data by context type and temporal unit. Chapter 8 provides a discussion of patterns of bone distribution through both time and space together with some brief concluding remarks. Following the Bibliography are the

figures, tables, and plates for all chapters. Figures and tables are individually numbered according to the chapter in which they are first mentioned (e.g., Figure 5.1 and Table 5.1 are the first figure and first table of Chapter 5). The plates are numbered serially in Roman numerals (I-XII). Finally there are three appendices. Appendix 1 is a reprint of the coding scheme used for recording the faunal material (from Meadow 1978), Appendix 2 is a listing of all measurements taken, and Appendix 3 is a list of all excavation units from which bone was analyzed. It is intended that hard copies of this work be bound in two volumes, the first including the text and the second the figures, tables, plates, and appendices. This should facilitate reference to the latter when reading the former.

Finally, I would like to observe that I believe the principal contributions of this work lie in three areas. The first is the documentation of faunal assemblages from a poorly known period of time on the Iranian plateau (sixth through late fourth millennium BC). The second is a series of small insights into animal exploitation by village agriculturalists in prehistoric southeastern Iran. The third is a better understanding of how great can be the variation in the nature of faunal assemblages recovered from different kinds of contexts in a Middle Eastern tell site. I ask the reader's indulgence for the fact that there are only tentative and not conclusive answers given to the series of small questions asked throughout the text. It is clear that I have not caught the piglet, and I can only hope that I have not been made to look too ridiculous in the process of trying.

Chapter 2

THE SETTING

2.1. TEPE YAHYA AND THE YAHYA PROJECT

Tepe Yahya has been characterized as one of the most isolated mounds in Iran. Located in the southeastern part of that country some 250 overland kilometers from the nearest population centers of Sirjan and Bandar 'Abbas, the site was visited by fewer than a dozen professional colleagues during six summers of excavation. Yet the highland, semi-arid Soghun valley where Yahya is situated lies astride an important route linking the agriculturally rich Halil Rud / Jaz Murian drainage in the east with such southern Zagros towns as Niriz, and Shiraz to the west (Figure 2.1). For its local settled population of a few hundred persons, the valley provides arable silts that, in places, can be dry-farmed but more commonly are irrigated from springs, qanats, or (today) tube wells. Land that is not cultivated is used for grazing flocks of goats and sheep. These animals belong in part to the settled agriculturalists and in part to nomadic pastoralists who

pass through the area in the spring and fall or else spend the summer using the valley and its surrounding slopes as their highland pastures.

As a result of grazing and woodcutting, the vegetation of that part of highland southeastern Iran where Tepe Yahya is located (hereafter called "the Yahya area") is strongly degraded with significant growth occurring only in isolated areas of the higher slopes. Valley or basin floors and lower slopes are heavily grazed with areas immediately around settlements or tent sites devoid of all except anti-pastural weeds. As far as ancient vegetation patterns are concerned, the palynological and paleoethnobotanical records from Tepe Yahya suggest that little overall change has taken place since the site was first occupied in the early 5th millennium bc (late 6th millennium BC: see Table 2.1). The data upon which this conclusion is based are discussed in detail elsewhere together with the evidence for field crop agriculture in the Yahya area during prehistoric times (Meadow 1986). Here, in Sections 2.2.-2.5., this evidence is summarized and a brief description of the geography including climate and modern vegetation and faunal patterns is provided.

Tepe Yahya was first visited by a survey team from Harvard University in August of 1967. Over the course of five days, a topographic map of the 2.5 hectare site was made (Figure 2.2) and a small sondage was sunk low on the south slope of the nearly 20 meter high mound (Lamberg-Karlovsky 1968, Meadow 1968). Subsequent excavation took place in the summers of 1968, 1969, 1970, 1971, 1973, and 1975 (e.g., Lamberg-Karlovsky 1969, 1970, 1970a, 1971, 1971a, 1972, 1973, 1974, 1976; Lamberg-Karlovsky and Tosi 1973). Excavations began in 1968

on the south face of the mound with a series of six 10-by-10 meter trenches laid out stepwise down the slope and designated "A" to "F" (Figure 2.2). As work progressed, additional areas were opened to the west of the main step trench (AW, BW, CW), to the east (C/DE), to the north across the top (e.g., AN, ANW, AN2, AN3, AN4), and down the north face (XA, XB/XBE, XC/XCE, XD, XE). Within each of these trenches, excavations were carried out largely by local men and boys directed by area supervisors who were responsible for keeping field notes, drawing sections, and making plans (Lamberg-Karlovsky 1986).

With publication of Progress Report I in 1970, the basic sequence of occupation at Tepe Yahya was defined and Roman numerals alotted to designate the major chronological divisions (Lamberg-Karlovsky 1970a: 5). These divisions were established on the basis of perceived unity of architecture and ceramics within a "period" and marked changes between periods. Additional seasons of excavation and more complete analysis of the material remains particularly by P.L. Kohl (1974), T.W. Beale (1978, 1986), D. Potts (1975, 1980, in progress), and A. Hastings (1980 and in progress) have permitted phases and subphases to be defined on the basis of more minor changes in architectural and artifactual configurations. The rough sequence is presented in Table 2.1 (adapted from Prickett 1986a), and relevant elaborations are discussed in Chapter 7. The three units in the middle of the sequence, namely IVC, IVB, and IVA, are, in spite of their modifying letters, full-fledged major divisions comparable to each of the others. These designations are so much a part of the literature that it seems counterproductive to change them. Period VII, however, is a relatively

new designation defined by Beale (1978) who found it useful to group into a separate unit the old VIC, D, and E of Lamberg-Karlovsky (1970a) together with earlier remains excavated in 1973.

Additional material identified by M.E. Prickett (1976, 1979, 1986, 1986a) from survey and excavations in the Shah Maran-Daulatabad basin (also known as the "Daulatabad valley") some 25 kilometers to the west of Yahya can be slotted in before Period VII and between Periods V and IVC. Of particular relevance to this discussion is Tepe Gaz Tavila-R37 (sometimes shortened to "R37") that Prickett believes to be partly contemporary with and partly earlier than Yahya period VII. This two hectare, 7.8 meter high site (Figure 2.3), part of a larger (nearly 10 hectare) complex situated near the toe of a major alluvial fan (Figure 2.4), was tested in 1973 (Prickett 1986a).

The significance of the excavations at Tepe Yahya for an understanding of the pre- and protohistory of the Middle East has been addressed by C. Burney (1975) as well as by members of the Yahya Project (e.g., Lamberg-Karlovsky 1972a, 1973, 1977, 1978; Lamberg-Karlovsky and Beale 1986; Beale 1973; Beale and Carter 1983; Kohl 1975, 1978, 1979; Potts 1977). Most of the discussions have focused on the implications of the Proto-Elamite complex of period IVC or on the local production of elaborately carved chlorite vessels principally during period IVB. What sets these periods apart is evidence for the integration of Yahya into far-flung and specialized administrative or exchange networks. For most of its occupation, however, Tepe Yahya was the site of a village farming and herding community, part of a series of such settlements spread rather thinly across the southern Zagros and into Baluchistan. Indeed,

for all periods except those of the 3rd and 2nd millennia (IVC, B, A), the various settlements of Yahya seem distinctly secondary to their larger and more numerous counterparts in the adjoining Daulatabad valley (Prickett 1986). (Compare distribution of sites in Figure 2.5 with that in Figure 2.4.) The Soghun valley with its smaller catchment area could not provide the quantities of water, whether from floods or from the water table, that were available in the much larger basin to the west. Yet during the 3rd and early 2nd millennia, Yahya continued to be occupied (or was reoccupied) while the Daulatabad valley was apparently deserted by permanent settlers. Here again, one of the reasons was probably water, a perennial source continuing to be present in the immediate vicinity of Yahya where the water table comes close to the surface. Only with the development of techniques to tap the water table using underground canals (qanats) was the Daulabatad valley again to be settled by village-folk and the Soghun valley to experience the establishment of villages in areas at some distance from the mound at Yahya.

2.2. GEOGRAPHIC SETTING

Tepe Yahya is located at about 56 degrees 52 minutes East longitude and 28 degrees 20 minutes North latititude in the southwestern corner of a tectonic basin (Figure 2.6) that, for ease of reference, is called the "Soghun valley" after its principal village. In that southwestern corner, the water table lies close to the surface and through it flows all surface runoff to escape the valley (Figure 2.5). In the past, at an earlier stage in the erosion of the bedrock at the exit to the basin,

the water table would have stood higher and marshy areas may have existed even up to the base of the site itself.

Surrounding the Soghun valley, except at the sole drainage exit in the southwest, are gravel fans and sharply dissected ridges (Figure 2.6) that, in the north and east, turn into imposing mountains reaching heights of more than 3000 m. The southern part of the basin is an alluvial plain of lakebed clays and playa sediments covering an area of about 68 sq. km and sloping gently from an altitude of about 1560 m in the north to 1500 m in the south. The lower half of this alluvium is suitable for extensive cultivation. North of the alluvial plain is an area of about 50 sq. km of more steeply sloping deposits that eventually attain an elevation of about 1900 m. Small parts of this area can be cultivated using water from perennial springs that emerge at the base of the rugged highlands.

The Soghun valley is part of the greater Rud-i Gushk drainage. Outflow from the valley passes through a gap in the highlands and descends about 500 m through an impressive series of fans and gravel terraces to the Shah Maran-Daulatabad basin some 25 km to the west. This much larger basin, also known as the "Daulatabad valley," collects runoff principally from the high mountains to the north and itself drains to the south into the Rud-i Kul, waters of which eventually reach the Persian Gulf west of Bandar 'Abbas. Around the valley are a series of alluvial fans that grade into silts at their bases. On the most easterly of the northern fans, M. Prickett has located some 400 hectares of late 5th and early 4th millennium BC fields over an area of about 7.5 sq. km (Figure 2.4). Both on the fan and at its base are a number of

sites contemporary with Yahya periods VI and V. Sites of Yahya period VII affiliation and earlier, however, occur only on the silts at the toe of the fan. These are 13 in number, one of which is Tepe Gaz Tavila-R37 (Prickett 1976, 1979, 1986, 1986a).

2.3. CLIMATE AND VEGETATION

The climate of this part of Iran is semi-arid with mean annual rainfall for the Soghun valley being about 250 mm and for the Daulatabad valley somewhat less (probably below 200 mm). Precipitation, always highly variable and often localized, occurs primarily in the late fall, winter (sometimes as snow), and early spring, although this small portion of the Iranian plateau also can receive torrential rains in late July and August due to the Indian Ocean monsoons. Average maximum and minimum temperatures for the Soghun valley range from approximately 35 to 18 degrees C in July and 13 to -1 degrees C in January with temperatures being cooler in the higher elevations and some 5 degrees C warmer in the lower Daulatabad valley (elevation 1020-1080 m). The Soghun valley is at the edge of the _sardsir_ or "cold area" where it is not possible to grow date palms (_Phoenix dactylifera_). In contrast, date palms are cultivated around Daulatabad village, which is thus in the _garmsir_ or "hot region" even though many lower lying areas in the Shah Maran-Daulatabad basin receive some frost in the winter.

On the _Vegetation Map of the Mediterranean Zone_ (UNESCO/FAO 1969), the Soghun valley is categorized as potentially being an area of "shrubs or tree pseudosteppes and open forests in less dry climates" with a transition to "steppe or tree-steppe with pistachio, almond, and

juniper" at higher elevations (categories 23 and 33). Zohary (1963: category 12) terms these units together as "supposed climax area of Pistachia-Amygdalus steppe forest," the "supposed" used advisedly to indicate the real effects of a negative mean annual water balance coupled with overgrazing and deforestation due to wood cutting.

The Shah Maran-Daulatabad basin is classed in the UNESCO/FAO map as "shrub or tree pseudosteppe and open forests in very dry climates" with tamarisk and willow in areas with a reliable source of moisture (category 22). Tamarisk does indeed grow on the playa silts where it serves to create phreatophyte mounds (Prickett 1979: 49). Zohary (1963) includes the Daulatabad valley in part in his category 29: "Acacietea flavae iranica and Nubo-Sindian classes (e.g., Euphorbietea laricae, etc.)." This classification reflects the fact that the garmsir areas to the east, west, and south of the Soghun valley include vegetation characteristic of the Gulf and Indian Ocean coastal regions. As is true throughout this part of Iran, however, vegetation is strongly degraded with a significant arboreal component present only where protected or inaccessible. Thus pistachio, almond, oak, and juniper all occur in isolated patches in the mountains to the north while willow and especially plane trees grow near springs where they are carefully protected, indeed venerated.

As settled agriculturalists and pastoralists have exploited the Yahya area for more than 7000 years, one might expect the environment to have been somewhat richer in vegetation in the past than it is today. In fact, however, the meager pollen record from Tepe Yahya (see Meadow 1986) indicates that, for the period between c. 5000 and 0 BC, the

vegetation of the Soghun valley was that of a warm, semi-arid, steppe with the presence of both saline soils and some swampy areas, just as it is today. Beginning perhaps as early as the 4th millennium BC, however, an increase in arboreal representation is evident, this suggesting something of a shift toward more savanna-like conditions, at least at higher elevations under a regime of cooler temperatures. This trend is well attested by the end of the 1st millennium BC.

Interestingly enough, the single pollen sample from Tepe Gaz Tavila-R37 indicates much the same conditions for the Daulatabad valley in the late 6th millennium BC as in the Soghun valley even though today the former receives less rainfall and is hotter than the latter. As noted above, a large area of ancient fields and numerous sites have been identified in the Daulatabad valley dating between the 6th and early 4th millennia BC. These, together with the pollen data, suggest a somewhat wetter environment there in the past than today as well as the presence of greater amounts of surface runoff that could be utilized for floodwater irrigation (see Meadow 1986 and Prickett 1986a for detailed discussion). An explanation for these phenomena can be found in the climatic models of J. Kutzbach and his associates (e.g., Kutzbach 1981, Swain, Kutzbach, and Hastenrath 1983, Kutzbach and Street-Perrott 1985). They suggest that both summer and winter precipitation would have been significantly greater at about 7000 BC than they are today because of increased thermal gradients produced by the earth being closest to the sun in July. As the earth's orbit shifted toward the present situation of perihelion in January, thermal gradients would have decreased and precipitation, particularly monsoon-related precipitation,

would have moderated, with c. 4000 BC being suggested as the date when the change would have begun to have become significant. That is precisely the time that the Daulatabad valley appears to have been deserted by settled agriculturalists who depended for their livlihood on floodwater irrigation on the alluvial fans and at the fan toes. As noted, however, water lies close to the surface of the Soghun valley at the point where Tepe Yahya is located, and this was probably a factor in permitting occupation to continue at that site into the 1st millennium BC by which time the technology for tapping underground water was developed.

2.4. AGRICULTURE

Today, as in the past, agriculture in the Soghun valley is based chiefly on cereal grains. Wheat is the principal crop with barley, sorghum, millets, and sesame also grown. The advent of diesel-powered tube wells and motorized transport, however, by 1975 had stimulated the truck farming of vegetables and cotton for urban markets (Ladjevardi 1976). In addition, as noted previously, date palms are cultivated in the Daulatabad valley.

Detailed study of the paleoethnobotanical record of Tepe Yahya and Tepe Gaz Tavila-R37 is being carried out by Lorenzo Costantini (e.g., 1984, 1985, 1985a) and has been discussed in detail elsewhere (Meadow 1986). Of special note are the presence of grapes (*Vitis* sp.) at Yahya as early as period VI and dates (*Phoenix dactylifera*) at R37 (6th millennium BC). Grapes would be difficult to grow even in the Soghun valley without an assured source of water and protection from

desiccating winds. It is perhaps significant in this regard that they are not attested from the Daulatabad sites. Date palm cultivation involves rather sophicaticated horticultural practices (e.g., Costantini 1985a), and thus the presence of date stones so early at R37 might be suspect were it not for the unimpeachable contexts from which they were excavated and the approximately contemporary finds from Mehrgarh in Pakistani Baluchistan (ibid.).

As for the cereals, wheat, barley, millets, oats, and rye are all attested in the archaeological record. Rye (Secale cereale), a cool weather cereal, has been identified only from Yahya IVB. The remains of oats (Avena sp.) come from Yahya VII, VI, and IVB, and of broomcorn millet (Panicum miliaceum) from R37 and Yahya IVB, IVA, and II. This latter distribution is particularly interesting as millet could have been grown in the warmer Daulatabad valley as a quick crop (60-65 days to maturity) after late summer rains. Its absence from the botanical record of Yahya until the late 3rd millennium would tend to confirm the lesser importance of floodwater irrigation in the Soghun valley where dry farming of the winter cereals would have been possible.

The wheats and barleys of Tepe Gaz Tavila-R37 and Tepe Yahya are all domesticated. The former include einkorn (Triticum monococcum: R37, Yahya VII-IVB), emmer (T. dicoccum: R37 and all of the Yahya sequence), bread wheat (T. aestivum: only at Yahya VI-II), club wheat (T. compactum: Yahya IVC and IVB), and Indian dwarf wheat (T. sphaerococcum: Yahya IVC-IVA). The earliest available evidence of R37 and Yahya VII is for the cultivation only of einkorn and emmer, this followed by bread wheat in Yahya VI and club wheat and Indian dwarf

wheat in Yahya IVC. The proliferation of wheats in Yahya IVC undoubtedly reflects the wide-ranging ties to both east and west suggested by the artifactual evidence.

The barleys represented include the two-rowed form (Hordeum distichum: R37 and all of Yahya except period VII), hulled and naked varieties of the six-row form (H. vulgare and H. vulgare v. nudum: R37 and all of Yahya except VII), and the round-grained naked six-row variety (H. sphaerococcum: Yahya V-IVA). The last again reveals ties with the east as it is known from Pakistani Baluchistan from at least as early as the 5th millennium BC (Costantini 1984a: 31). The absence of barley remains from Yahya VII may be an artifact of the areas sampled or may reflect the fact that it was truly not grown until period VI in the Soghun valley, this possibly indicating less saline soil conditions.

The practice of cereal crop agriculture in both the Soghun and Daulatabad valleys was probably based on fall sowing and spring harvesting and not on the spring sowing "horticultural growth" suggested by Sherratt (1980: 317-319). This can be deduced from the climatic patterns discussed above. While one might be able to argue that sufficient permanent water was available for spring sowing in the southwestern corner of the Soghun valley, this was certainly not the case for the area of the Shah Maran-Daulatabad basin where the oldest sites are found. Indeed it appears that the summer monsoon-related rains were of critical importance for agriculture in that hotter, drier basin, the water being "stored" in the silts at the fan toe or in the stone-wall alluvium traps on the fan itself. Seed would be planted in the moist sediment in the fall and the winter and spring rains hopefully

would provide sufficient additional moisture for ripening. Dormancy would be shorter in the Daulatabad valley and harvesting earlier than in the Soghun valley. (For further discussion see Meadow (1986)).

As for agricultural technology, the remains of cattle are attested from the earliest periods (see Chapter 5). These animals could be used to trample seeds into damp fields or to pull plow and field-leveler. Direct evidence for the plow is found only in Yahya IVC where what is clearly a plow symbol appears on Proto-Elamite incised account tablets (e.g., Lamberg-Karlovsky 1971: plates II and III). Cereal storage is probably attested by the small doorless "rooms" of Yahya VIIC-B, the large coarse ware vessels of Yahya VI-VC, the small round pits of Yahya IVB.6, and a large round pit of Yahya IVA (Beale 1986, Potts 1980).

2.5. ANIMALS

The modern wild fauna of southeastern Iran is principally Palearctic in character, but with significant Indian and Ethiopian elements present. Although no zoological studies have been made in the Soghun or Daulatabad valleys, a good idea of the range of fauna to be expected can be obtained by reference to surveys in neighboring areas carried out, for example, by Lay (1967: mammals), Hue and Etchecopar (1970: birds), and Anderson (1968, 1974: reptiles and amphibians). All wild mammals, excepting bats, that can be expected to occur in the Yahya are today or in the recent past are listed in Table 2.2 (taken from Meadow 1986: table 3.3). Excluding taxa smaller than the hare (Lepus capensis), almost all genera are represented at Yahya or R37 (compare Table 2.2 with Table 4.1). Remains of small rodents and insectivores were

recovered also, principally in water sieved samples, but these have yet to be studied. In contrast, very few of the many bird, reptile, and amphibian taxa that could be expected to occur in the Yahya area have been indentified from the archaeological deposits. This, too, may change when the water sieved samples are examined as most of the non-mammalian taxa have very small bones.

As for domestic animals, the following are kept by the villagers or pastoralists of southeastern Iran today: dogs, cats, horses, donkeys, horse/donkey hybrids, camels, cattle (principally humped), goats, sheep, chickens, and ducks. Goats and sheep are most numerous by far with the latter tending to outnumber the former. There is considerable external demand for sheep's wool and meat and thus, to the degree that the Yahya area is tied into the national economy, there is economic pressure for additional sheep to be raised for products to be exported from the immediate area. Goats are kept principally for their milk from which yogurt and cheese are made although also for their meat and for their hair which is used by nomadic peoples to make tents.

Cattle are used by villagers principally as draft animals although cows also provide milk. They are relatively few in number and are generally supplement-fed on chaff, straw, and barley. Interestingly enough, cattle are also used as riding animals and beasts of burden by those villagers without access to motorized transport or to a donkey or horse. Between 1967 and 1975 it was not uncommon to see one or two small humped cattle carrying bags of grain from one village to the next. When loaded, the handler would generally lead the animals. On the return trip, he would often ride one.

Horses, rare in the region, are kept principally by wealthier individuals, although the status that they used to convey has been largely usurped by the motorcylce or automobile. Donkeys are found more commonly in larger settlements where they are used for hauling goods. Camels are used exclusively by nomadic pastoralists that make the Yahya area their winter or summer home. As everywhere in the Middle East, dogs serve as guard animals and as scavengers. Chickens and ducks are useful not only for eggs, but also as a relatively inexpensive meal to serve a guest.

The following information on sheep and goat husbandry was collected by Yasmin Ladjevardi (1976). Most of the young are born in late February with a lesser number coming in late November. Young are nursed for about 6 weeks before being separated from their mothers, the latter then being milked over a period of about 3 months for human consumption. Both goat and sheep milk is consumed. Breeding begins toward the end of June, although if most young are born in February, most breeding must take place in September (gestation period: c. 5 months). Well-fed females can be bred during their second year. Goats are said to be harder to control than sheep although easier to feed as they do not require supplements. Male goats are not sold for meat but consumed as the need arises. Male sheep are sold at the age of 6 months for the meat market with the most robust animals being kept back for breeding, the desired ratio being about 15 females to 1 male. Female goats and sheep are kept as long as possible but are generally sold or slaughtered at between 5 and 6 years of age when their teeth (presumably incisors) have worn down. Both sheep and goats are sheared in the late

spring. One shepherd is said to be able to control a mixed herd of 300 sheep and goats.

Chapter 3

PROCEDURES OF FAUNAL ANALYSIS

3.1. INTRODUCTION

After cleaning, repairing, and labeling a faunal collection, there are two basic ways a researcher can proceed. He or she can sort and record an assemblage excavation unit by excavation unit (the "lot method") or, after sorting, can combine like skeletal parts ("elements") from different units and record the whole assemblage element by element (the "element method"). The method or mix of methods chosen will depend upon the size and nature of the collection, the experience of the analyst, the amount of skilled or semi-skilled help available, and the nature of the recording techniques employed. (See LaBianca (1978) for a detailed discussion of "skeletal part assemblages versus findspot assemblages".)

When I began analysis of the Yahya faunal collection, I used the element method. I was relatively inexperienced in the identification of mammalian faunas, I had a field assistant who was even more so, and I had developed a computer coding procedure that I assumed would permit me

to recombine material in any fashion I chose. As our work proceeded, however, it became increasingly clear to me that under conditions of limited work space, with a large and homogeneous collection, the element method involved an extra procedural step that was, in fact, slowing down analysis without providing a compensating amount of precision in identification or characterization. Every scrap of bone had to be labeled, and with every label came the opportunity for a mistake. If, after packing, a bone should chance to fragment, there was less hope of easily finding the pieces amongst all the other broken elements of the same type. Furthermore, within an excavation unit, different elements can often be found to articulate, this providing information on butchering and disposal practices. Finally, when thinking about the nature of "samples" in archaeology in general and faunal studies in particular, I became convinced that the basic unit for analysis as well as for interpretation should be not the bone or element or fragment, but the contents of an excavation unit (Gamble 1978, Meadow 1976, 1980). All these considerations led me to complete the analysis of the Yahya material using the lot method and, in fact, to gather all the element-sorted materials back into their original lots. During the course of analysis, however, all non-mammal remains were extracted from the individual units together with the remains of mammals other than sheep, goat, gazelle, and cattle. The total number of such specimens, for R37 and Yahya VII-IVC, is below 200 and these were best able to be dealt with separately from the mass of the collection.

3.2. PREPARATION OF THE LOTS

During excavation at Tepe Yahya, bones were gathered and placed usually in plastic bags that, however, were not tightly sealed. As the deposits were largely free of salt, it was found possible to wash the faunal material and this was done either in the field (during the 1971, 1973, and 1975 seasons) or at the Peabody Museum (for material not washed in the field). Material cleaned in Cambridge was soaked in a very dilute solution of citric acid and carefully rinsed. Lots cleaned in Iran were washed by the workers who washed pottery and who, on occasion, used a soft brush to remove the sediment from particularly encrusted specimens. (During the course of washing, it is possible that some specimens acquired surface sheen by being rubbed either with the brush or with the gritty fingers of the washer.) After drying thoroughly (but never in direct sunlight), the individual lots were rebagged in plastic bags (in Iran), or placed into open museum boxes and trays (in Cambridge). <u>All</u> faunal material recovered from Tepe Yahya and Tepe Gaz Tavila-R37 was shipped to the United States with the exception of some material from Yahya period IVB that was analyzed in the field during the 1975 season. Material to be shipped was packed in cardboard cartons and crated. No special precautions were taken in packing the material, with the result that a certain amount of damage occurred in transit. The abrasion and breakage that did occur, however, were considerably less than the damage that had already been inflicted on the specimens in the course of excavation and during handling immediately after excavation. As a result of these circumstances, almost every bone

from the early periods exhibits modern breaks or signs of abrasion, a circumstance that precludes a definitive study of prehistoric fragmentation procedures.

Following cleaning or unbagging of each lot in Cambridge, repairs were made, where possible, to specimens broken during excavation, handling, or transport. Greatest attention was lavished on mandibles, maxillaries, horncores, the articular ends of long bones, and other post-cranial specimens with articular surfaces. Less regard was paid to vertebrae, ribs, and badly fragmented pieces of skull and shaft. This hierarchy reflects the usefulness of the various elements and fragments for zooarchaeological purposes (see below). All repairs were made with Duco cement, that can be dissolved in acetone should the need arise. It usually was not necessary either in the field or in the laboratory to apply preservative to the specimens. When it was deemed advisable to consolidate a particularly significant piece, however, either a water soluable or an acetone soluable compound was used, the most convenient being Duco cement diluted in acetone. In the field, white glue diluted in water was sometimes used.

The last step in preparing a collection of bones for analysis was labeling the individual specimens with a number denoting the excavation unit. These six digit numbers were assigned rather arbitrarily although some attempt was made to give numbers within a group to units from a particular period, trench, and year of excavation. The first two digits refer to the site ("11" = Yahya, "12" = Gaz Tavila-R37) and the following four digits to the excavation unit. At this point or later during the course of analysis, individual specimens or groups of similar

specimens were given unique identifying numbers starting at "1" with a possible limit of "9999". Specimens found to articulate were given sequential numbers where possible. Fragments were grouped and given a single number only when they could be described in precisely the same fashion in the numerical coding system. In many cases, such fragments were not, in fact, physically labeled, the numbers only being recorded during the numerical coding process. (This is an advantage of the lot method of analysis and can save considerable amounts of processing time). All pieces that could be measured, that provided information on sex of animal or age at death, or that bore traces of butchering or use were individually numbered using a "Sharpie" permanent black marker or India ink. Following analysis, specimens were placed in open museum boxes that were arranged in trays in sequence according to excavation unit code. These materials are now stored in the Peabody Museum of Archaeology and Ethnology, Harvard University.

3.3. IDENTIFICATION

Identification of specimens was based on recognition of skeletal part followed by determination of taxon. Inability to recognize skeletal part (or "element") led immediately to recording a piece as "long bone fragment" or "indeterminate fragment". Determination of taxon was based on comparison with modern specimens of known species and on the use of published and unpublished comparative osteological texts.

In the course of my career as a faunal analyst, the Yahya collection was the second collection I worked on, the first being that from Hajji Firuz, a neolithic site in northwestern Iran (now published:

Meadow 1983). By 1979 when I completed analysis of the material from the early periods at Yahya, however, I had also worked on collections from Balakot, Mehrgarh, and Jalilpur in Pakistan (Meadow 1979, 1981, 1984, 1984a). As a result, it is fair to say that this corpus from Yahya reflects varying degrees of experience on my part in applying identifying characters. With this fact in mind, I have rechecked my identifications of some of the collection. This review, however, has led to only a very few changes and those principally among specimens of small bovids classed originally as "sheep or goat or gazelle". Identification of the bones from smaller mammals (but not rodents) was mostly carried out in 1977 at the Institut fur Paleoanatomie und Geschichte der Tiermedizin der Universitat Munchen and at the Zoologische Staatssammlung Munchen with the assistance of Prof. Dr. Joachim Boessneck, Prof. Dr. Angela von den Driesch, and Herr Dr. Mostefa Kokabi. Identifications of the bird bones were made by Prof. Boessneck and checked later by me (see Chapter 4, section 4.3.).

Except for the comparative material in Munich that was consulted for identification of the smaller mammals and birds, my main source for modern comparative collections has been the Museum of Comparative Zoology, Harvard University. I have used extensively their series of skeletons from domestic sheep (Ovis aries), domestic goats (Capra hircus), gazelle (Gazella subgutturosa and Gazella gazella), domestic cattle (Bos taurus and Bos indicus), equids (various wild and domestic species and hybrids of the genus Equus), and wild and domestic pigs (Sus scrofa). I have also consulted their comprehensive series of dog, wolf, and jackal skeletons (Canis familiaris, Canis

lupus, and Canis aureus) and have made use of the remainder of the collections as need arose. While in Iran, I gathered bones of domestic goats that were slaughtered to feed the members of the Yahya project and these proved to be very useful particularly when dealing with remains from younger animals.

Comparative osteological texts have been compiled by various researchers and some of them have been published. For European faunas, the most useful illustrated atlas was found to be that by Elisabeth Schmid (1972). It proved a particularly helpful handbook for checking from which side of the animal a bone came as only left post-cranial elements are illustrated. As a key to identification, an equally valuable source of information was a handout prepared (in German) by Joachim Boessneck for his classes. Other texts dealing exclusively with domestic animals include those by Robert Barone (1976) and Sisson and Grossman (Getty 1975). These last were most helpful when faced with skull fragments, carpal and tarsal bones, and with the need to deal with anatomical terminology. As for more specialized studies, that of Boessneck, Muller, and Teichert (1964, summarized in English by Boessneck 1969), was indispensible as a guide to identifying sheep and goat bones. Also useful for this purpose was a manuscript prepared by Barbara Lawrence when she was studying the faunal material from Cayonu (now published, Lawrence 1980). The principal value of this last has been to show that some of the characteristics described by Boessneck, Muller, and Teichert as useful for distinguishing modern European sheep from modern European goats may be less useful in other areas and at other periods. At the same time, however, it may be possible to define

other characteristics that appear to work consistently on one's own collection. (For further discussion, see Chapter 5.)

3.4. RECORDING FAUNAL DATA

The numerical coding system ("BONECODE") that was developed to record the Yahya and Daulatablad R37 fauna has been published (Meadow 1978). For purposes of reference, it is reproduced as Appendix 1. Comments here are restricted to clarifying specific analytical procedures.

Each specimen or group of similar specimens with an individual identifying number was allotted one data line and recorded according to either the post-cranial or cranial format (distinguished by a "1" or "2", respectively, in the 11th column of the 80-column form). In addition, a specimen that could be measured was also recorded on one or more measurement format data lines (with a "3" in column 11). Two or more articulating or fused elements were given successive bone identification numbers (columns 7-10) and the appropriate code was entered in column 12 (see Appendix 1). Where more than a single measurement data line was required for a specimen, appropriate codes were entered, again in column 12 (see Appendix 2).

The next three columns (13-15) were used in all formats for skeletal part ("element") identification. Except for maxillary, mandible, horncore, and antler fragments ("018" through "023"), all cranial remains were coded "001". Further description was accomplished by using the appropriate columns of the cranial format (columns 38-57 and, for jaws with teeth, columns 60-75). Otherwise, use of element identification codes was straightforward. Almost all pieces with a

preserved articular surface could be identified to element and appropriately coded. Unidentified long bone fragments ("116") and fragments not otherwise identified ("117") were usually coded in groups (locus by locus) unless specific pieces deserved to be treated separately; the numbers of fragments involved were noted in the appropriate columns (29-30, see below). Loose teeth were coded according to position in the jaw (upper or lower: "113" or "114") or as fragments ("118"). Identification of phalanges as coming from the front or rear legs was generally possible only for equid and some cattle elements (following Dottrens 1946) unless articulation with a metacarpal or metatarsal was evident. The sole body part coded according to element in such a way as to indicate portion present was the pelvis ("066" through "072"). Fragmentation of other post-cranial elements was indicated using columns 39-40 (see below).

A three-digit code for taxon was entered for each piece or group in columns 16-18 of the cranial and post-cranial formats. (See below for further discussion of the measurement format.) Each piece was identified to some taxonomic level or else was classified according to the size of animal from which it was likely to have come. In some few instances, particularly when dealing with badly fragmented, abraded, or crushed pieces, it was not possible to even classify the remains. In such cases the entry was coded "indeterminate" ("000").

Used to qualify the animal identification were two input columns: 19 - "domestication" and 20 - "certainty". In cases where the state of domestication of the animal represented by a specimen in hand could be determined on the basis of bone morphology (e.g., caprine horncores: see

below, Chapter 5) or on the basis of the fact that the animal identified is generally thought of as a wild animal (e.g., gazelle), the domestication column was coded to reflect that fact. The most commonly used code, therefore, was "0" (not determinable). As for the certainty of identification code, its state was chosen quite subjectively to reflect my confidence in the identification made. An identification about which I had little doubt was coded as "1" (standard). A "2" was used in the course of work to flag preliminary identifications. These were later upgraded to a "3" (possible), "4" (probable), or "5" (definite) following comparison with modern specimens or consultation with osteology texts or notes. Identifications were also qualified as "possible" or "probable" if I had more or less doubt about the reliability of a determination that, while made objectively, nevertheless might prove incorrect if more of the bone were present or were better preserved.

The most common use of the "possible" and "probable" qualifiers was with shaft fragments. Since completing the Yahya collection, and because of the experience gained in analyzing it, I have abandoned the individual recording of shaft splinters (less than two thirds of the circumference present) and have, instead, come to group them all together according animal size class. This procedural decision on my part is due not only to difficulties in identifying taxa from bones without articular ends, but even more to the fact that such bones can be identified to element in only a very uneven fashion. For example, it is quite easy to recognize almost any tiny fragment of caprine radius shaft or scapula blade, while much larger pieces of humerus shaft often cannot

be differentiated from femur fragments. As I quantify faunal remains by raw bone counts and weights within size classes and by standardized counts (based on articular ends) when documenting the proportions of different taxa, I find little value in spending the extra time attempting to identify and individually code masses of shaft fragments.

Following coding for degree of certainty of identification, states for eight other attributes were determined (where possible and applicable) and coded for both cranial and post-cranial specimens in columns 21 through 28. These attributes are symmetry, sex, relative age, relative size, pathology, burning, modification, and origin of fragmentation. The coding of symmetry requires no discussion beyond what appears in Appendix 1. Coding for sex, like that for domestication, was based on observation of qualitative morphological and not metrical characters. Thus, it was restricted largely to the horncore and pelvis in bovids (see Chapter 5). Sex was also determinable, on occasion, from the atlas, axis, and occipital area of the cranium in caprines (Boessneck, Muller, and Teichert 1964: 36-47, Boessneck 1969: 334-337) and from the canines in pigs and equids. As was also the case for domestication, a sex characterization could be qualified as "possible" if I entertained some doubt about the certainty of its determination.

The attributes "relative age" and "relative size" were coded together, the latter modifying the former in the sense that within each age category, the animal represented could be "large", "medium", or "small". For bones from young animals, the first and third size categories were used, somewhat subjectively, to note whether they were

at the high or low end of the size range characteristic of a given age category. For bones judged to be from animals that had reached full size (sub-adult or adult), the "large" and "small" size categories were used, again somewhat subjectively, to indicate if an abnormally large or small animal was represented. If relative age was not determinable, relative size was coded under the assumption that the bone came from an adult animal. Relative age was coded "not determinable" for many skeletal parts unless it was clear from the structure or surface texture of the bone that it came from a young animal in which case it would be coded "young" or, in some cases, "foetal or infantile" or "infantile". The elements so coded include: compact bones of the post-cranial skeleton (e.g., carpals and tarsals except calcaneal tuber), third phalanges, proximal metapodials, any long bone fragments without preserved epiphyses, and specimens that fuse early (acetabulum, distal scapula, distal humerus, proximal radius). Bones with later fusing epiphyses could be coded according to other designations, although many fused specimens could not be characterized better than "sub-adult or adult". The approximate age indicated by skull fragments could sometimes be ascertained from the state of fusion of the sutures while the age indicated by jaw fragments could be much more precisely determined by consideration of the stage of eruption and state of wear of the teeth.

There are three principal reasons to code for relative age. First, one can qualify other means of describing age (e.g., indicate that a fused distal tibia clearly comes from an adult instead of from a juvenile or sub-adult animal). Second, one can indicate age when it can

be coded in no other fashion (e.g., a long bone comes from a very young animal but lacks both ends and therefore will not be coded according to state of fusion). Third, through the use of the relative age and relative size codes, one can to some degree individually characterize a specimen in a qualitative fashion that could prove useful for purposes of quantification. Thus Bokonyi (1970) suggested this technique for arriving at a more "maximal" estimate of the minimum number of individuals represented by a collection of like skeletal parts. Here, I wish to emphasize the importance of the second reason. The articular ends of bones from young and very young animals are less able than those from older animals to withstand destructive butchering, disposal, and depositional activities and post-depositional forces. They can, therefore, be markedly underrepresented in faunal collections, only the more durable shafts surviving. Coding for relative age can help identify the presence of such elements that might otherwise go unrecognized. (See discussion of bovid pelves in Chapter 5.)

The next column to be coded was that for "disease", evidence of which might give some indication of conditions under which domestic animals were kept (e.g., von den Driesch 1975, Siegel 1976, Baker and Brothwell 1980). Each specimen was examined for signs of having been broken while the animal was alive, for exostosis (growth of bone in areas of muscle attachment or tendon insertion), for non-inflamed hyperplasia (benign growth of bone), for holes and grinding in the articular surface (indicating diseases of the joint), and for holes far from any articular surface. Other conditions (particularly those found on bones of the skull) were noted in abbreviated form in the comments

section of the coding line. In fact, evidence for pathologies of any kind were rare on bones in the Yahya and Gaz Tavila-R37 collections, the only ones present in any number being tooth anomalies and alveolar resorption.

Up to this point, all attributes recorded relate to the biology of the animal. The next three attributes reflect bone modification following death of the animal. Signs of burning on a bone have often been cited as evidence for an animal having been cooked and consumed. In fact, only a particular type of cooking - roasting - leaves marks ("spit-marks") that can sometimes be unambiguously identified as evidence for culinary activities. (For a particularly good example of spit marks - sharply delimited changes in degree of burning resulting from differential coverage of a carcass by meat - see Vigne and Marinval-Vigne 1983.) Otherwise any bone, whether or not representing the remains of a meal, can become burned, and even differentially burned, by coming into contact with fire or hot coals sometime during the disposal or deposition process. There are no clear examples of "spit-marks" in the Yahya or Gaz Tavila-R37 material. A small proportion of bones did show clear signs of burning, however, and these were coded based on color from gray-white (calcined) through black (carbonized) to brownish-red (slightly burnt - see Appendix 1). Most bones from the early periods were, in fact, mottled reddish-brown, very few being the creamy tan characteristic of bones of later periods at Yahya. The cause of such a color change is not known although staining promoted by water percolation could be one explanation particularly in those units where bone was recovered from among masses of coarse reddish

potsherds (especially period VI, see Chapter). In any event, unless there was clear evidence of carbonization or calcination, a specimen was not coded for burning.

Other alterations to a bone were coded as "modifications" (Appendix 1). These include signs of rodent gnawing, carnivore chewing, and human use or abuse of a specimen, but not including outright breakage or cut marks that were coded elsewhere. A high proportion of the Yahya specimens bear, to different degrees, the fine parallel striations characteristic of rodent gnawing (see Chapter 7). A much lower percentage were clearly chewed by carnivores, this indicated by conical indentations, irregular but densely spaced pitting, or broad shallow grooves especially near the ends of bones. Identification was made on the basis of comparison with specimens altered under known circumstances, although there is now a growing literature particularly on identifying the effects of carnivores on bone collections. Bones were coded as "lightly chewed" by rodents or carnivores unless morphological features were significantly obscured in which case they were coded as "heavily chewed". Human modifications coded here include non-penetrating blow marks, which I found difficult to identify objectively unless related to cut marks; retouch, which was defined as fine chips removed from the edge of a break and which could be related to tool shaping, to tapping for marrow, or even to carnivore activity (e.g., Binford 1981); polishing; piercing; and shaped tool. In all cases, coding was conservative in the sense that clear signs of a modification had to be present for a specimen to be judged modified. If there was some doubt on an identification, a "2" was entered in column

37. If evidence for more than one type of modication was present, the state with the highest code (from 1 to 9) was entered, and the additional modifications were noted in the comments.

A kind of bone modification for which it can be particularly difficult to determine cause is surface sheen or "polish". A sheen is imparted to the surface of a bone through abrasion, and such abrasion can occur any time after a bone is stripped of flesh. Polish associated with some other modification of a bone can sometimes be linked to activities causing that modification. Thus, sheen is commonly found on bones that were shaped in some fashion, the polish coming during the shaping process or during use (but, see Brain 1981: 15 for naturally shaped and polished "tools"). Polish is also found on bones that apparently were not intentionally shaped but whose natural outlines are markedly eroded or softened either through use or through having been "mouthed" or chewed by carnivores (e.g., Binford 1981: 76). A problem comes with bones that bear greater or lesser amounts of polish but that are merely broken. Polish on articular surfaces can be caused in the living animal due to bone on bone contact in a joint that has lost synovia because of disease or trauma (e.g., Meadow 1983: 392). Sheen can be imparted to a bone during the cleaning process when it is rubbed with a finger to remove attached sediment. Polish can also be caused after a specimen is deposited and before it is excavated, this through trampling by both man and animal (e.g., Brain 1981: 15, 141). In fact, as Binford (1981: e.g., 178), Brain (1981: e.g., 141), and others have stressed, one should not merely assume that bone breakage, wear, and polish patterns were caused by humans just because the bones on which

they appear occur in association with stone tools (or other artifacts).

When I designed the numerical coding scheme used for the Yahya and Daulatabad R37 material, I was interested in trying to describe each specimen with regard to breakage and modification. This was to be accomplished through noting the weight of each piece (columns 33-36) and, for post-cranial pieces, the following (based largely on the work of Sadek-Kooros 1966, 1972, 1975): fragment size relative to a complete element of the same type (column 38), whether the proximal or distal end (or both) was present (39-40), fracture type proximally and distally (43-44), longitudinal position of primary fracture on shaft (45), position of fracture on shaft (46-47), position of fracture proximally and distally (48-51) (see Appendix 1). For cranial specimens, the approximate amount of each skull element present was noted in columns 38-57 (again, see Appendix 1). In order to code the post-cranial fracture attributes at all, however, and in order that the cranial descriptors be at all useful, it was necessary that the ancient breakage patterns not be obscured by modern damage. As was noted above, however, most specimens from Tepe Yahya in particular were broken during excavation, handling, and transport with complete repair not possible on many of these. Thus, column 28 was more often than not coded "modern", "pre-depositional and minor recent", or "pre-depositional and major recent" in describing origin of fragmentation.

Following origin of fragmentation, the number of pieces was entered in columns 29-30. This was usually "01" except where like fragments were combined or elements were fused. In the latter case, one of the elements would be coded "01" and the other(s) "00"; the whole group

would be weighed together and the result coded in columns 33-36 of the line for the element that was coded "01". In columns 31-32, the "number of elements" was coded. This was usually equal to the number of pieces unless it was "00" for specimens not identified as to element. The number of elements could also be greater than the number of pieces for skull fragments with more than one element present, for jaws with teeth (each tooth and the maxillary or mandible were each counted as an element), or for a radius with a piece of ulna shaft fused to it. In this last case, a "4" was coded in column 37 as well. The weight of each piece or group of pieces, to the nearest half gram, was coded in columns 33-36. A postal scale of the type commonly used in Western Europe was employed (direct read with a weighted arm counterbalancing a platform for placing the item to be weighed). Accuracy was judged to be +/- 0.5 gram for weights less than 100 grams and +/- 5.0 grams from 100 to 500 grams. Given the amount of modern breakage, the fact of incomplete cleaning in some instances, and differing degrees of leaching or fossilization, it is clear that weights are mere approximations and can really only be compared in a meaningful fashion with specimens from like deposits.

The final column (37) coded on both post-cranial and cranial formats was "comment follows". As noted above, this column was also used to indicate if the identification of a modification was questionable or if a small piece of radius or ulna was attached to the other. Comments themselves were coded in columns 66-80 for post-cranial specimens and abbreviated in columns 75-80 for cranial pieces.

Attributes restricted to post-cranial specimens were coded in columns 38 through 57 of the post-cranial format. Fragment size (column 38) was estimated more or less objectively in quarter-element divisions in relation to a like element from a like animal of similar size and age. Pieces severely broken during or after excavation were coded as "not determinable" or, if more than one half of the element was present, as "modern break" (Appendix 1). The part of a long bone represented (columns 39-40) was coded for all specimens where it was determinable. Proximal or distal ends with some shaft attached to the articular area were differentiated from ends with more than half of the shaft attached (end and shaft) and from fragments where only the articular area was present (articulation). Pieces without any articular surface were coded according to whether the fragment was principally from the proximal, distal, or mid-part of the shaft. These various states could also be defined in such a way as to be usable for describing such elements as the scapula, pelvis, ulna, carpals, tarsals, vertebrae, and ribs.

Coding of state of fusion (columns 41-42) was generally straightforward (Appendix 1). A bone was described as having an "epiphyseal line" when the epiphysis was firmly attached to the diaphysis but some separation still existed somewhere in the epiphyseal plate area. The scapula and pelvis were coded for fusion only for the glenoid and acetabular areas respectively. Metapodials and first/second phalanges were conceived of as if they had proximal, shaft, and distal growth centers even though the proximal (for metapodia) and distal (for phalanges) can be said to fuse before birth. In other words, a fused first phalanx was coded as "proximal fused / distal fused" (code "04")

instead of merely "fused" (code "01"). These and other cumbersome conventions require modification in future use of "BONECODE".

An attempt to describe post-cranial fracture patterns was made in columns 43 through 51 (Appendix 1). As noted above, the approach adopted follows the work of Hind Sadek-Kooros (1966, 1972, 1975). Thus, for long bones, fracture types ("greenstick", "transverse", "oblique", and "spiral") were defined (columns 43-44), the location of the primary fracture lengthwise relative to the distal end was noted (column 45), and where on the shaft the break began (medial / lateral / anterior / posterior) was coded (columns 46-47). In addition, the parts of the articular ends present were also described (columns 48-51). While seemingly comprehensive, I ultimately did not find the recording system particularly easy to use or satisfactory in nature because of the number of clear-cut distinctions that had to be made for what might be called "borderline" cases. Often a "primary fracture" could not be clearly defined because of splintering or spalling of bone that obscured where on the shaft the primary break had commenced or terminated. Transverse fractures (more or less evenly "snapped off" shaft) graded into oblique breaks (starting at one side and proceeding diagonally to the opposite) that, in turn, graded into spiral fractures (starting on one quadrant and proceeding around the bone to an adjoining quadrant). For a bone broken at both ends, only one break could be coded as "primary", but defining "primary" as "major" or "largest" still did not make the break always easy to identify. In the end, whether because of modern breaks or because of problems of definition, only a relatively small proportion of the long bones could be coded at all for fracture. As the breaks on

so many could not be described, one must question how representative the coded ones are of breakage patterns. A final problem is the question of when the breaks occurred and what caused them. The fact that carnivore activity can cause breaks similar to those made by humans has already been noted. A even more vexing problem is the question of breakage after deposition but before excavation. I found it impossible, in most instances, to identify this kind of breakage and thus am left wondering about its extent, particularly as the occasional piece demonstrably so broken did occur.

The final type of bone modification coded was cut marks. Each bone was examined for evidence of these and they were coded as to whether they occurred on or near the articular surface (columns 54-57) or on the shaft itself (columns 52-53). The side of the bone on which the cuts appeared was also coded (at the same time in the same columns). For vertebrae, the same codes were used to indicate whether cuts were found dorsally (columns 52-53), centrally (54-55), or ventrally (56-57). For purposes of this numerical code, single and multiple cuts had to be treated as similar as did deep, shallow, vertical, diagonal, and horizontal cuts. Some qualification or further description was possible in the area left for comments, but, even so, the technique is not much more than an abbreviated description suitable only to indicate approximate location of cut(s). This attribute, however, is the one of principal interest when trying to determine butchering and dismembering procedures. Additional work on cut marks, for instance to determine type of tool used, requires specialized study beyond the scope of this report.

The last five columns of the post-cranial coding line (before the comments) were, in fact, used to code cranial material -- individual loose teeth (columns 58-62). Tooth type (upper/lower, milk/permanent), class (incisor, canine, premolar, molar), position (first, second, etc.), root development, and wear were all noted, where possible. The wear of sheep and goat mandibular teeth were described using numerical codes assigned to patterns described by Sebastian Payne (1973 - see Appendix 1). A simplified system was used for sheep and goat incisors and maxillary teeth as well as for both the mandibular and maxillary teeth of other bovid taxa. For these, deciduous teeth were described as "lightly" or "more than only lightly" worn, depending upon whether or not the dentine was exposed through erosion of the enamel. Permanent cheekteeth were coded as "unworn", "slightly worn", "moderately worn", "heavily worn", and "very heavily worn". For the fist, no dentine is exposed; for the second, dentine is exposed but not completely joined; for the third, dentine is joined but enamel rings still are present; for the fourth, enamel rings are worn away from one cusp; and for the fifth, no enamel rings remain.

The same codings were also used, although more subjectively, for incisors as well as for suid, carnivore, and equid teeth. For suids, stage definitions remain the same as for bovids, but it is more difficult, in certain instances, to define exactly when one stage ends and the next begins. For equid cheekteeth, the opening of any enamel ring or ridge would cause the tooth to be coded as "heavily worn". For carnivores, any exposure of dentine led a tooth to be classed as "moderately worn", further wear being coded subjectively. For the

incisors of bovids and suids, a "heavily worn" tooth was one worn almost to the root, with "moderate" describing any wear less than that but more than when dentine had just been exposed. The boundary between "slight" and "moderate" in describing incisor wear was thus particularly subjective except in the case of equids where the boundary is well marked by the appearance of the "dental star" of secondary dentine (see Silver 1969, fig. 39).

The same codings for tooth wear were also used in the cranial format, columns 60-75, for teeth in place in maxillary or mandible. Unlike post-cranial format entries, cranial entries following column 37 are position dependent in the sense that a column or group of columns was coded only if the corresponding skull element or tooth was present. For the skull, the approximate preserved size of the element(s) present was coded ("less than 2/3" or "2/3 or more" in columns 40-55). More specific codes were developed for horncores, antlers, and mandibles (columns 38-39 and 56-57, see Appendix 1). Cut marks were coded according to the element on which they occurred (columns 58-59, see Appendix 1). As was noted previously, the utility of much of this coding, particularly for size of element, was severely restricted by modern breaks that were especially prevalent among the more fragile skull bones.

In addition to being coded on a post-cranial or cranial format line, a specimen whose dimensions could usefully be taken was accorded one or more meaurement format line(s). As was noted above, this last format type was designated by a "3" in column 11 and column 12 was used for an individualizing code if more than a single measurement line was

required for a specimen (see Appendix 2). Columns 1-10 (site, locus, bone no.) and columns 13-15 (element type) were coded in exactly the same fashion as for the corresponding post-cranial or cranial line. (If the entries in these columns of the measurement line did not match those in the corresponding post-cranial or cranial line, the measurement line would be rejected by the computer editing program developed to handle this data. If accepted by the editing program, details on animal identification, state of domestication, certainty of identification, side, sex, age, and burning were added automatically from the corresponding post-cranial or cranial entry.) Measurements themselves were entered in columns 16-75. A block of 5 columns was reserved for each measurement, the first column being used to qualify the following dimension. Thus, a "1" was coded if the measurement was taken in the standard fashion, a "2" if it was estimated, a "3" if it was influenced by a pathology, a "4" if there was some other comment, a "5" if the specimen being measured was clearly not from an adult animal, and a "6" if the piece was burned. The next 4 columns of each block were used for the measurement itself, this taken with dial slide gauge "calipers" or in a measuring box, whichever was appropriate (von den Driesch 1976). Measurements were taken to the nearest tenth of a millimeter (0.1 mm or 0.01 cm). and coded without entering a decimal point and with leading zeros where appropriate (e.g., 35.7 mm was coded 0357). Like the second part of the cranial format, the measurement format is positional, the columns in which a particular dimension was entered being element specific (see Appendix 2).

Measurements taken on almost all of the Yahya and Gaz Tavila-R37 material were for the purpose of documenting size and proportions and not for the purpose of identification or systematics. Dimensions, for the most part, are those defined by von den Driesch (1976), exceptions being noted in Appendix 2 and in the the text and tables where appropriate. Discussion of measurements taken on bovid teeth can be found in Chapter 5.

3.5. CONCLUSION

The above description provides an indication of the kind and amount of information that can be recorded for a specimen as well as of the variation in what actually was recorded for this Yahya/Gaz Tavila-R37 collection. Much more was recorded than is used in the following chapters, and, in hindsight, much of what was recorded need not have been because it has not proved useful to me. This last is particularly true of information on breakage. Bone modification requires specilized study. The attribute states defined here are often too specific for my uses but too general for someone interested in that topic.

A computer generated catalog of the faunal collection from Tepe Gaz Tavila-R37 and of the portion of the Yahya collection discussed in the following chapters will placed on file in the archives of the Peabody Museum of Archaeology and Ethnology, Harvard University in early 1987. Measurement data for all measured specimens are included here in Appendix 2 or in the text and tables of Chapters 4 and 5.

Chapter 4

THE ANIMALS: NON-BOVIDS

4.1. INTRODUCTION

The genera and species of non-human vertebrates identified from archaeological deposits excavated on the south side of Tepe Yahya for periods VII through IVC and at Tepe Gaz Tavila-R37 are listed in Table 4.1. In cases where only the genus is noted, discussion of possible species identifications will be found in the text. The first time that a species name is used, whether it be in Table 4.1 or in the text of this or the next chapter, the name of the person to whom that scientific name is attributed (the author) is cited in conformity with Article 51 of the International Code of Zoological Nomenclature (third edition: 1985). Thus, where the species-group name (i.e., name of species or subspecies) is combined with a genus name other than the original one, the name of the author of the species-group name is enclosed in parentheses. In Table 4.1 and in the text of this and the next chapter, authors' names employed are those cited in the following sources: for

tortoises, Cheylan (1981); for birds, Peters and others (1934-1979); and for mammals, Corbet (1978). The reader is referred to those compendia for bibliography. The name of the author for any species-group name will not be cited more than once unless there is compelling reason to do so. Authors for genus names are cited only in Table 4.1.

In this and the next chapter, locus designations as well as period attributions are given for specimens listed in the text or tables or discussed on an individual basis. Approximate dates for each of the periods can be found in Table 2.1. Locus designations are 3-digit or 4-digit numbers (e.g., 159 or 1930) that occur as the first part of the specimen identification number (e.g., 159-13). For further discussion, see Chapters 3 and 6. For a listing of archaeological loci arranged by locus designation, see Appendix 3. For a presentation of the faunal material context by context, see Chapter 7.

4.2. REPTILES

4.2.1. Identification

The only reptile identified in the faunal collections from the south side of Tepe Yahya for periods VII - IVC is the tortoise Testudo graeca. Of the non-bovids, it is the most frequently represented taxon from the site with the probable exception of certain rodents, the bones of which have not yet been studied. The 67 specimens are listed in Table 4.2.

The only form of Testudo reported from the Kerman area today is Testudo graeca zaruduyi Nikolsky 1896 (Anderson 1974: 42; Cheylan 1981: 44-45, fig. 20). Testudo graeca ibera Pallas, 1814 is found

more to the west and Testudo horsfieldii Gray, 1844 more to the north and east. For one specimen, 877-12, it is possible to exclude an identification of T. horsfieldii because the xiphiplastron and hypoplastron are not interlocked, the two bones having been joined in the living animal by fibrous cartilage that formed a kind of hinge across the plastron, this a characteristic of the non-burrowing form T. graeca. In the burrowing forms of tortoise, like T. horsfieldii, the xiphiplastron and hypoplastron are more firmly interlocked at the sutures (Chuck Crumly, personal communication 1/15/86).

4.2.2. Comparative Material

Two specimens identified as Testudo graeca zaruduyi were collected by Henry Field in the area of Khurramabad, Luristan, western Iran in 1950. These specimens, nos. 53819 and 53829 of the collection of the Herptology Department of the Museum of Comparative Zoology, Harvard University, are a male and female respectively (based on distinctions noted by Cheylan 1981: 27) and have the following dimensions:

A - 53819	carapace	mid-line length:	188.8 mm
		greatest length:	190.0 mm
		greatest breadth:	143.0 mm
	plastron	mid-line length:	164.0 mm
		greatest length:	175.0 mm
B - 53829	carapace	mid-line length:	121.7 mm
		greatest length:	123.0 mm
		greatest breadth:	99.0 mm
	plastron	mid-line length:	110.2 mm
		greatest length:	114.6 mm

These measurements include the keratinous material on the bone; dimensions including only the bone, especially for the carapace, would be somewhat less. The greatest carapace length recorded for Testudo

graeca in Iran is 350 mm, in the Kerman area 230 mm (Cheylan 1981: 18). Thus the two MCZ specimens can be considered as middle-sized and small. Since there is no significant size difference between male and female individuals of the same age, the female must have been younger than the male when killed.

4.2.3. Testudo remains from Tepe Yahya

Tortoise carapace, plastron, and skeletal fragments recovered from the south side of Tepe Yahya, period VII - IVC are listed in Table 4.2. (There are no Testudo remains from Tepe Gaz Tavila-R37.) Phase, locus and specimen number, body part(s), and size in relation to the two modern comparative specimens listed in section 4.2.2. are noted. Also listed are the number of pieces designated by each locus-bone number, these pieces coming from the same animal.

4.2.4. Discussion

Approximately 40 individuals are represented in Table 4.2. Of these, 7 were larger than comparative specimen A, 20 were about the size of A (GTE, E, LTE), 4 between A and B, 6 about the size of B, and 3 less than B. Thus a full range of sizes is represented but with animals equal in size to or larger than A being considerably more frequent than those between A and B and those equal to or smaller than B (23:8:9). There is no particular concentration of any size in any given occupational period, fragments from larger individuals being more common throughout.

As far as body parts are concerned, there are 2 individuals represented by long bones, 9 by plastron fragments, 28 by carapace

fragments, and 1 by both carapace and plastron. It is possible that the greater representation by carapace reflects use of that body part for containers, a practice for which there is one piece of evidence from VIIB-A in the form of 3 pleurals the ventral margins of which were ground smooth where they had originally met the peripherals. Even if a tortoise were gathered principally for its carapace, the soft parts would not have been discarded uneaten if the animal were captured alive. These animals could never have provided a significant portion of the human diet, however.

The need to absorb heat, but not to excess, dictates the diurnal activity patterns of Testudo graeca (Meek and Jayes 1982: 194-197). In hot weather they shuttle between sunlit and shaded areas and thus they must inhabit locations where both are available. In cooler weather with shorter days, their activity level is reduced although they do not burrow deeply or hibernate. Overall, the farther south their distribution, the higher the altitudes at which they are found (Cheylan 1981: 52-55), this reflecting the effects of excessive heat in the summers on their own metabolism as well as, more importantly, on their eggs. The absence of Testudo remains at Tepe Gaz Tavilah-R37, therefore, may not be purely due to chance but be a reflection of the fact that the Shah Maran-Daulatabad basin is lower and hotter than the Soghun valley. Admittedly on the basis of minimal evidence, Cheylan (1981: 54) places the mean altitude of T. g. zarundnyi at 1900-2100 m. This would suggest that in the Yahya area they would be confined to the sides and north end of the valley, a distribution which, according to local informants (personal communications), is indeed the case

today. These areas also provide a more suitable habitat as far as available vegetation and shade are concerned.

4.3. BIRDS

4.3.1. Introduction

There were 33 bird bones recovered from Tepe Yahya, south side, period VII to sub-period IVC. An additional specimen was found at Tepe Gaz Tavila-R37. The taxa represented are listed in Table 4.1, tabulated by major temporal division in Table 4.3, and discussed below. The archaeological contexts for the specimens are presented in Chapter 7.

All identifications were initially made by Professor Dr. Joachim Boessneck, Institut fur Palaeoanatomie, Domestikationsforschung und Geschichte der Tiermedizin der Universitat Munchen in July, 1977, and August, 1979, using the collections of that institution (see von den Driesch and Schaffer 1985: 82-104). These identifications were confirmed by the author with the assistance of Tonya Largy in January, 1986, using the collections of the Museum of Comparative Zoology, Harvard University. Neither comparative collection has a good sample of east Iranian and South Asian birds with the result that some material, particularly of the family Phasianidae, could be identified only to the family level. Measurements of the specimens follow von den Driesch (1976: 103-129) in technique and in use of abbreviations. They were made by both Boessneck and the author. Dimensions in parentheses are estimated.

The bird material is presented according to the taxonomic arrangement of The Birds of the Western Palearctic (Cramp and Simmons 1977, 1980, 1983; Cramp 1985) with non-passerines followed by passerines. A note about the distribution and habitat of each taxon is made based on those volumes as well as on Hue and Etchecopar (1970) who have dealt more specifically with the Iranian plateau.

4.3.2. Not-identified material

Of the bird bones, 30 specimens were identified, 4 not identified. The latter include the following: a shaft fragment from a small/medium-size bird (somewhat smaller than a francolin) from Yahya IVC.2 (locus 3713); a posterior phalanx from a medium/large-size bird (larger than a francolin, smaller than a goose) also from Yahya IVC.2 (locus 3704); an ulna shaft fragment from a francolin-size bird from Yahya VIIB.5-3 (locus 2308); and two fragments from the same ulna shaft of a francolin-size bird from Tepe Gaz Tavila-R37 (loci 3504, 3507).

4.3.3. Ciconiiformes

4.3.3.1. Ardeidae, (?)*Ardea cinerea* (grey heron)

The single specimen of what was probably a grey heron is the proximal end and shaft of a left carpometacarpus from Yahya VIIA-VIB.2 (locus 1933). The one measurement that can be taken is proximal breadth (Bp = 14.9 mm). Boessneck notes that while the identification is most likely, it is not possible to exclude an identification of "*Casmerodius albus*" (= *Egretta alba* (Linnaeus, 1758) - great white egret). Both species are winter visitors to the Persian Gulf coast and are not usually found

in upland areas especially during cold weather (Cramp and Simmons 1977: 297-312). Spring or fall visits to the Soghun valley during fly-over seem most likely to take advantage of food available in in the marshy areas postulated for the southern part of the valley.

4.3.4. Anseriformes

4.3.4.1. (?)Anatidae, Cygnus olor (mute swan)

A bevel-ended tool made of a right proximal ulna shaft of a very large bird was found on the floor of Yahya IVC.2 room 5 (see Chapter 7 and Plate I). The bird concerned is larger than any raptor or stork from the area, being comparable in size to Leptoptilos dubius (Gmelin, 1789), the adjutant stork of northern South Asia. A more likely candidate, from the points of view of both biogeography and morphology, is the mute swan, Cygnus olor, that is said to occasionally reach the Persian Gulf (Cramp and Simmons 1977: 375) and the Makran coast (Hue and Etchecopar 1970: 95-96) in winter. This bird, like the heron, could have visited the Soghun valley during spring or fall fly-over. A rather small (female?) mute swan from the Franklin Park Zoo (Massachusetts), the only specimen with ulnae in the collection of the Museum of Comparative Zoology, has bones that compare favorably in morphology with that from Yahya. As with the archaeological specimen, the ulnae of swans lack the marked raised knobs (loci for attachment of secondary flight feathers) that are characteristic of all stork ulnae examined. For the sake of documentation, the least diameter that could be measured on the Yahya specimen is 12.0 mm.

4.3.4.2. Anatidae, Anas platyrhynchos (mallard)

The basal articular area of a right coracoid from a mallard comes from phase IVC.1 (locus 3724). Its breadth dimension (BF) would have been somewhat greater than 21 mm. To judge from distribution maps, this shallow water feeder, an extremely adaptable bird tolerant of human presence, can be expected in the Yahya area today in the winter (Cramp and Simmons 1977: 506).

4.3.4.3. Anatidae, (?)Aytha ferina (pochard)

A right humerus shaft, probably from a pochard, comes from phase IVC.1 (locus 3724). Its shaft diameter (SC) is 5.5 mm. Small groups of this bird are said to winter in the Persian Gulf area (Cramp and Simmons 1977: 564). As a bottom-feeding diver, it prefers deeper water than the mallard (1-2.5 m) and thus seems unlikely to have remained in the Yahya area for long.

4.3.5. Accipitriformes

4.3.5.1. Accipitridae, Aquila chrysaetos (golden eagle) and (?)Gypaetus barbatus (lamergeier)

A right carpometacarpus shaft fragment identified as coming from a small (therefore male?) golden eagle was found in a IVC.1 context (locus 3724). A right ulna shaft fragment from a small lamergeier or a large golden eagle comes from VIIB.1 (locus 194). The smallest breadth of the shaft (SC) is 9.6 mm, and it bears multiple parallel longitudinal scratch marks that may indicate modification for or use as a tool (both

ends have modern breaks). The year-round range of both these raptors includes the Yahya area (Cramp and Simmons 1980: 60, 236). Although having somewhat different habitat preferences, both would be at home in the Soghun valley with its steep sides and enclosed nature providing suitable nesting sites and air-currents for gliding.

4.3.5.2. Accipitridae, Hieraaetus fasciatus (Bonelli's eagle)

A left distal ulna from Bonelli's eagle comes from phase IVC.2 (locus 3746). It has a smallest breadth of shaft (Sc) measurement of 5.8 mm, this rather small dimension indicating that perhaps it comes from a male. This eagle, considerably smaller than Aquila species, occurs today in the Yahya region (Cramp and Simmons 1980: 260) where the Soghun valley would provide suitable highland habitat.

4.3.6. Galliformes

4.3.6.1. Phasianidae, Gallus gallus (domestic) (domestic chicken)

A left tarsometatarsus of a large male chicken (Plate I) comes from VIB.2 rubble deposits (locus 1930). It is creamy white in color and the organic fraction is not so leached as in other bones from the same locus. This latter factor, in particular, leads one to suspect that the bone is intrusive, chicken bones being fairly common in first millennium BC levels at Tepe Yahya. Southeastern Iran is not within the known range of junglefowl (Gallus gallus), wild relatives of the domestic chicken that occur in northern India east to southeastern China. If this specimen is not intrusive, its late fifth millennium bc (early fifth millennium BC) date would make it the earliest example, known to

date, of domestic fowl west of the current range of its wild relative (Crawford 1984: 300; Chow Ben-Shun (1984: 363-364) reports domestic chicken from neolithic sites in northern China dating to the 6th millennium bc). The bone is missing its proximal end, but a shaft breadth (SC) of 6.7 mm and distal breadth (Bd) of 14.5 mm indicate that it came from a large animal, the well developed spur showing that it was a male (compare measurements in Thesing 1977: Table 9).

4.3.6.2. Phasianidae, (?)Alectoris chukar (chukar)

A somewhat burned left distal tibiotarsus comes from Yahya VIIB.5-3 (locus 2308). Boessneck notes that the bone is relatively small and thus he is not certain about the identification. An approximate least shaft breadth (SC) is 3.6 mm. The chukar inhabits semi-arid or arid areas thoughout most of the eastern Palearctic on a year-round basis and is "adapted to extreme conditions of life in rugged and often remote terrain" (Cramp and Simmons 1980: 453), although it will also come into cultivated fields. Its habitat is complementary to those of the francolins (see 4.3.6.3.).

4.3.6.3. Phasianidae, Francolinus francolinus (black francolin)

There are two species of francolin found in southeastern Iran: F. francolinus - the black francolin and the somewhat smaller F. pondicerianus (Gmelin, 1789) - the grey partridge (Hue and Etchecopar 1970: 220-223). A left humerus shaft from Yahya VA.1 (locus 1318) probably comes from the former (SC = 5.6 mm) although identification as domestic chicken cannot be excluded on grounds of morphology or size.

The distal end and shaft of a right tarsometatarsus of a female (no spur) also probably comes from a black francolin. This specimen dates to Yahya VC (locus 791) and, because of the location of the breaks, was not measurable. It is from a smaller animal than the humerus, however, which would indicate that the latter came from a male. Both specimens seem somewhat larger than one would expect for the grey partridge. The habitat preferences of the two species of francolin are rather different, the black francolin said to be "a secretive bird of dense vegetation, inhabiting both level areas of grass or crops, and tamarisk or other scrub in wadis between hills. Tolerant of water, either in marshes or in river" (Cramp and Simmons 1980: 479-480). The grey partridge, however, is noted as being more gregarious and as affecting "dry, open grass and thorn-scrub country. Avoids heavy forest and humid tracts. Commonly found in the neighbourhood of villages and cultivation" (Ali 1972: 32).

4.3.6.4. Phasianidae, Alectoris chukar or Francolinus sp.

The following 12 specimens could have come from either of the two francolins or from the chukar:

- furcula from IVC.1 (locus 3707): small and gracile, therefore grey partridge?;
- left coracoid fragment from IVC.2 (locus 3713);
- sternum fragment from IVC.1 (locus 3707);
- complete right humerus from VIB.2-VIIA (locus 1931): GL = 54.2 mm, Bp = 13.1 mm, SC = 4.5 mm, Bd = 10.0 mm;
- nearly complete left humerus from VB (locus 1343):

GL = 53.3 mm, Bp = (12.5 mm), SC = 4.5 mm;

- left humerus shaft from IVC.2 (locus 3704);
- left humerus shaft from VIIA (locus 161);
- left femur shaft from VIIB.2 (locus 2102);
- right and left tibiotarsus shafts from IVC.2 (locus 3704): both are very gracile;
- right tibiotarsus shaft fragment from IVC.2 (locus 3764): also very gracile;
- right tibiotarsus shaft fragment from IVC.2 (locus 3763): also very gracile.

It is not possible to be more specific about the identifications in the absence of suitable comparative material. All three galliforms could be year-round inhabitants of the Soghun valley. For further notes on habitat for each of the species, see the immediately preceding sub-sections.

4.3.7. Gruiformes

4.3.7.1. Otididae, Chlamydotis undulata (houbara)

A right femur shaft identified as houbara comes from IVC.1 (locus 3715). It has a breadth of shaft (SC) of 7.5 mm. This bustard of the steppe and semi-desert would inhabit the Yahya area in the summer where it would breed, moving to warmer areas of the Persian Gulf coast and the Indus Valley for the winter (Cramp and Simmons 1980: 650-651). It is very much an arid, flat-land bird coming occasionally to the fringes of cultivated fields. One therefore could expect to find it in the northern part of the Soghun valley where it would come into contact with people

grazing their herds. Almost twice the size and with more than twice the wingspan of a francolin, the houbara is a prime game bird, today heavily hunted (almost to extinction) in Arabia and Pakistan by Arabs using falcons.

4.3.8. Columbiformes

4.3.8.1. Columbidae, Columba livia (rock dove and pigeon)

A right humerus shaft of a rock dove or pigeon comes from Yahya IVC.1 (locus 399). It has a shaft breadth (SC) of 5.5 mm. Included in this species are the wild rock dove and its domestic relative the pigeon as well as feral pigeons (Hawes 1984: 351). The natural habitat of the wild form is linked to appropriate nesting sites in rock cliffs with access to stands of grasses or weeds (or cereals) and to drinking water. Neither its original distribution nor the history of its domestication are well known (Cramp 1985: 285-286; Hawes 1984: 353-354) although what have been interpreted as terracotta representations of "doves" have been noted from at least as early as the fifth millennium in Mesopotamia (e.g., Zeuner 1963: 461).

4.3.8.2. Columbidae (?)Streptopelia sp. (dove)

A small fragment of a sternum, possibly of a turtle dove (S. turtur (Linnaeus, 1758)) or collared dove (S. decaocto (Frivaldzky, 1838)) comes from Yahya IVC.2 (locus 3763). To judge from distribution maps, both doves can be found in the Yahya area during the summer (Cramp 1985: 342, 354). A resident dove of the region today is the laughing dove (S. senegalensis (Linnaeus, 1766)). All are arid land species, the

last being particularly commensal (Cramp 1985: 367).

4.3.9. Strigiformes

4.3.9.1. Strigidae, Bubo bubo (eagle owl)

One left carpometacarpus shaft fragment of an eagle owl comes from Yahya VIIB.2 (locus 187), another from a VI-IVC mixed locus (3768). A third specimen, an ulna shaft fragment that was ground to a bevel at one end and polished, comes from IVC.2-1 levels (locus 286). The eagle owl is a large nocturnal bird that apparently lives year-round in the Yahya area (Cramp 1985: 468). Its requirements of secure nesting areas and sufficient prey lead it to inhabit steep rocky terrain with access to open grasslands, fields, and marshes where water vole to hare size animals and similar size birds can be found.

4.3.10. Passeriformes

4.3.10.1. Corvidae, Corvus corax (raven)

The distinctive distal end of a carpometacarpus of the genus Corvus from phase VIB.2 (locus 1932) is the only identified specimen of a passerine bird in the studied collection of faunal remains from Tepe Yahya. To judge from comparative material, the specimen is too large to have come from any corvid species except C. corax even though the distribution map in Hue and Etchecopar (1970: 514) indicates that the Soghun valley falls in the range of C. ruficollis Lesson, 1830/1 rather than in the range of the raven. The omnivorous raven will nest in trees but more often prefers cliffs.

4.3.11. Discussion

The identified bird remains from Tepe Yahya are summarized in Table 4.3. Tabulated for each taxon are period, sub-period, or phase of the specimens, part of the body represented, whether a specimen shows signs of having been used as a tool, season the taxon is likely to be in the Soghun valley, and required habitat for nesting or feeding whichever might be the limiting factor.

Noteworthy is the fact that those birds that might not be considered as usual food species are represented by wing bones only: (?)grey heron, mute swan, golden eagle or lamergeier, Bonelli's eagle, eagle owl, and raven. Furthermore, 3 of these 7 taxa are represented by bones made into tools. Both these factors indicate that perhaps the wings of these larger species were being collected for tool manufacture, for their feathers, or for both reasons. Food species, in contrast, are generally represented by leg bones and breast bones. Where a wing is noted, it is in the form of the bone closest to the breast - the humerus. Given the small size of the collection, however, such patterns can be no more than suggestive.

As far as seasonality is concerned, all seasons of the year are potentially represented by the large number of resident taxa. Migratory species would have been present in the spring, summer, or fall. All major habitat zones in the Soghun valley area are also represented: rocky ridges and mountains, valley floor and sloping margins, and standing or slowly moving bodies of water. Even those taxa living on the sides of the valley could be expected to come to the valley floor

for food, thus all specimens could potentially have been gathered not too far from the site. Methods used for hunting could have included snares, nets, arrows, and spears. Of these one might expect direct evidence only for arrows if some of the microliths could be identified as having been used in that fashion. True "arrowheads" are not present at Yahya until sub-period IVB (Piperno 1973: 71).

4.4. MAMMALS

4.4.1. Introduction

The mammalian taxa identified from Tepes Yahya and Gaz Tavila-R37 are listed in Table 4.1, tabulated by temporal unit in Table 4.4, and discussed individually in the sections below and in Chapter 5. For all taxa, details on archaeological provenience can be found in Chapter 7. Measurements recorded in the following sections were taken following von den Driesch (1976) if described using abbreviations for post-cranial dimensions (e.g., "Bd" for distal breadth) or using "vdD-#" for cranial dimensions (# = von den Driesch page number and measurement number, e.g., 64:4 = page 64, measurement 4). Otherwise, the nature of the measurement is described. Dimensions in parentheses are estimated.

4.4.2. Lagomorpha

4.4.2.1. Leporidae, Lepus capensis (brown or cape hare)

The hare is represented at Tepe Gaz Tavila-R37 by the following 3 specimens:

3570-1: left mandible: diastema to M/1 socket, no teeth;

height from basal border to P/3 alveolus: 10.6 mm;

length of diastema (vdD-64:4): 17.0 mm.

3549-17: right first upper incisor, mid-section only.

3567-14: right pelvis, acetabulum and most of ilium;

LAR = 8.2 mm, SH = 7.7 mm.

From Tepe Yahya, sub-period VC there is 1 specimen:

1912-20: right radius, fused proximal end and much of shaft;

Bp = 6.2 mm, SD = 3.7 mm.

Comparison of the dimensions of these hare bones with those from somewhat earlier sites in southeastern Anatolia and western Iran reveals that the R37/Yahya specimens all come from small animals. Thus Kusatman (1983: 67-68) reports dimensions from Cayonu (southeastern Anatolia, late 8th-early 7th millennium bc) of 19.2-23.0 mm for length of diastema, 7.7-8.7 mm for radius Bp, and 10.0-12.5 for pelvic LAR, all well above those for the R37/Yahya specimens. Bokonyi (1977: 84) notes similarly larger dimensions for proximal radii from Tepes Asiab and Sarab (Kermanshah Valley, western Iran, 8th and 6th millennia bc): Bp = 8.0-8.5 mm.

These data on prehistoric hares are consistent with those on modern hares that indicate decreasing body size from west to east. Although there is no information on modern animals from southeastern Iran, Roberts (1977: 212) notes that the hares of southern and central Pakistan (just to the east of Iran) are smaller and have a lighter build than European populations. He reports that 12 modern cape hare from Waziristan and Baluchistan have a body length range of 395-495 mm, this contrasting with the ranges reported by van den Brink (1968: 79) for

Europe (485-675 mm) and by Haltenorth and Diller (1977: 164) for Africa and Europe (440-760 mm, the African material being at the lower end of this range).

The cape hare is found throughout Iran except in the higher mountains and denser forests although Lay (1967: 152) suggests that they may be less frequent in southeastern Iran than in the rest of the country. Roberts (1977: 212-213) also notes that the cape hares of Baluchistan are rather thinly and widely distributed, being associated with "semi-arid mountain steppe regions." Both the Shah Maran-Daulatabad basin and the Soghun valley would have provided suitable habitats for these crepuscular herbivores. That their remains are rare in the archaeological assemblages, and even absent from the screened deposits of Yahya IVC, indicates that they either were not commonly hunted or that their remains did not make it back to the settlement.

4.4.3. Rodentia

4.4.3.1. Hystricidae, Hystrix indica (Indian crested porcupine)

The porcupine is represented at Tepe Yahya by the following 10 bones:

745-40 (VIA): left upper incisor.
844-8 (VC) : right fused proximal femur; DC = 14.7 mm.
-9 : right fused distal femur; Bd = 26.2 mm; breadth of patellar trochlea = 13.0 mm.
-10 : right fused proximal tibia; Bp = 27.8 mm.
-11 : corpus of a thoracic vertebra, epiphyses fused.
-12 : 2 proximal ribs, epiphyses fused.
758-8 (VC) : right fused distal humerus; Bd = 28.6 mm;

BT = 17.9 mm.

-9 : left fused distal radius; greatest distal dimension = 14.1 mm; greatest dimension of the articular surface = 11.5 mm.

772-12 (VB) : a worn right lower cheektooth.

The 8 specimens from Yahya VC all were recovered from room 1 and probably all came from the same individual. There are no specimens from Tepe Gaz Tavila-R37.

The Indian crested porcupine is found throughout the Middle East and into South and Central Asia (Corbet 1978: 159, 258). It is an extremely adaptable, principally nocturnal, vegetarian rodent that can reach upwards of 18 kg in weight (Roberts 1977: 233-235). Its remains have only rarely been reported from archaeological deposits. These animals can burrow deeply, and it is just possible that the "VC" specimens came from an animal that died in a burrow dug sometime after that sub-period. The bones were severely broken up during excavation and it seems likely that many elements were discarded by the workmen. Furthermore, it is possible that the VIA and VB teeth also came from that same specimen, having been transported by rodents.

4.4.4. Carnivora

4.4.4.1. Canidae, *Canis* sp. (wolf/jackal/dog) and *C. familiaris* (dog)

Canis bones were found at both Tepes Yahya and Gaz Tavila-R37. (For purposes of comparison, measurements taken on a specimen of *Canis lupus pallipes* Sykes, 1831 from near Ergani, Turkey - Museum of Comparative Zoology 51602 - are juxtaposed between slashes - / / - to

those from R37 and Yahya.):

R37: 3550-3: 6th cervical vertebra, epiphyses fused; incomplete;
breadth of cranial articular surface = 14.0 mm/16.2/;
height of cranial articular surface = 13.2 mm/15.2/.

Yahya: 813-7 (VIIC.1): right proximal ulna, fused, broken during excavation; DPA = 26.2 mm/29.5/.

856-7 (VIA): right mandible, originally complete but badly smashed during excavation and not all pieces recovered; broken permanent canine and P/2 present;
canine: root closed, short, and stubby;
P/2: slight wear, posterior portion short with poorly developed accessory cusp, no cingulum;
missing are: horizontal ramus between distal root of P/3 and mesial root of M/1, tip of angular process, tip of coronoid process, and bone on the buccal side of the incisor/canine area;
teeth all closely spaced with only thin ridge of bone between root sockets of adjacent teeth;
M/3 at anterior margin of ascending ramus but not set into that ramus; illustrated: Plate II;
meaurements ("Lawrence" refers to dimension designation in Lawrence and Reed 1983: 488):
a) crown length P/2 = (10) mm/12.2/;
b) crown breadth P/2 = 5.0 mm/5.7/;
c) alveolar length P/2 = 9.0 mm/11.6/;
d) alveolar length P/1-P/2 = 14.5 mm/19.8/;

e) alveolar length M/2-M/3 = 16.0 mm/15.7/;

f) least length from posterior edge of socket for M/3 to the notch between the condylar process and the angular process = 40.0 mm/45.8/;

g) height from condylar process to basal point of angular process with calipers as flat as possible on condylar process = 32.5 mm/35.2/;

h) breadth condylar process = 26.6 mm/28.0/;

i) greatest latero-medial thickness at base of ascending ramus including dorsal margin of masseteric fossa (Lawrence 51) = 13.0 mm/11.0/;

j) greatest latero-medial thickness below M/1 (Lawrence 48, vdD-61:17) = 13.0 mm/12.6/;

k) least latero-medial thickness in premolar region (Lawrence 66) = (10.8) mm/9.5/;

l) least latero-medial thickness at symphysis, calipers held flat on medial side = (13.5) mm/13.0/;

m) least horizontal ramus height from behind M/3 to basal margin taken on lingual side = 30.2 mm/28.8/;

n) height of horizontal ramus taken on lingual side behind M/1 and at right angles to basal border (vdD-61:19) = 29.1 mm/27.6/;

o) height of horizontal ramus taken on lingual side between P/2 and P/3 and at right angles to basal border (vdD-61:20, approx. = Lawrence 69) = 20.5 mm/22.2/.

1354-9 (VB): left mandibular permanent (?)P/2, distal half only (modern break); shows polish but no wear; posterior portion short with single small and gracile accessory cusp and with marked cingulum-like broadening buccally; principal cusp gracile with sharp posterior margin; crown breadth = (5) mm/5.7/.

1354-11 (VB): left mandibular permanent canine, aboral half only (modern break) and missing most of the root; shows polish but no wear; golden retriever sized.

1347-1 (VB): right tibia shaft; proximal end apparently chewed off by a carnivore, distal end broken during excavation; SD = 12.4 mm/14.9/.

1333-11 (VA.2): left maxillary M1/; all margins except lingual broken away during excavation or handling; golden retriever sized, no measurements possible; "ledge" projecting medially from protocone and hypocone is wide with lingual margin almost cusp-like; cones widely spaced and polished with slight wearing of enamel.

1326-13 (VA.1): phalanx 1 of digit III or IV; fused; GL = 26.4 mm/29.6-31.4/, Bp = 8.4 mm/10.1-10.2/, SD = 5.0 mm/6.3-6.4/, Bd = 7.0 mm/8.5-8.8/.

3756-1 (IVC.2): phalanx 2 of digit III or IV; fused; pitted, eroded (passed through carnivore digestive tract?); GL = (19) mm/20.8-21.7/, SD = 5.0 mm/5.6-6.1/.

For purposes of identification, selected dimensions of the R37 vertebra and of the Yahya mandible, ulna, tibia, phalanx 1, and phalanx 2 are compared, in Figure 4.1, with comparable measurements from the Turkish wolf using the ratio diagram technique introduced to zoology by G.G. Simpson (1941). Each dimension (X) taken on an archaeological specimen is plotted in relation to the corresponding dimension of the Turkish wolf (the standard) by the following formula:

$$d = \log X - \log \text{standard} \quad \text{OR} \quad d = \log (X/\text{standard})$$

where "d" is the positive or negative difference of logarithms (base 10) that is plotted in relation to a zero-line that represents the standard. "The horizontal distance between any two points in the diagram is proportional to the ratio of the dimensions of the two animals" (Simpson, Roe, and Lewontin 1960: 357). Thus points falling in a vertical line, even if larger or smaller than the standard, have the same proportional relationship to the standard. Using this technique it is possible to compare different dimensions on the same bone or on different bones independent of scale. For example, even though the length of a tooth row will be always be greater than the length of a single tooth in that row, the two dimensions can be compared relative to the standard. For ease of interpretation the different points may be connected down the y-axis of the diagram by a line which, however, has no statistical significance. In Figure 4.1, if a dimension is relatively larger than one plotted above or below, it will fall to the right, smaller to the left. (For the phalanges, ranges are plotted. These reflect the relationship of the single Yahya specimens with the largest and smallest of the eight wolf digit III and IV phalanges 1 or 2

instead of with an average wolf phalanx 1 or 2.)

As noted, the standard used in Figure 4.1 is the Turkish wolf MCZ 51602. This specimen is an appropriate choice because, in the absence of southeast Iranian wolf skeletons, it approximates the kind of animal we can expect from that region, namely a relatively small and gracile wolf but an animal somewhat larger than both Indian and Arabian wolves (Lawrence and Reed 1983: figs. 186, 187). This particular animal is also one of the four specimens for which selected mandible dimensions were averaged to produce the standard for figures 187-189 of Lawrence and Reed's study "The Dogs of Jarmo" (1983). Because of the fragmented nature of the Yahya mandible, only four of the measurements used in that study could also be used here (values i, j, k, and o, noted above). For these, the ranges of variation cited by Lawrence and Reed for the four Near Eastern Canis lupus pallipes specimens are plotted on Figure 4.1 along with points for a fifth, "dog-like," wolf (FMNH 84468) plotted separately in the Jarmo paper. Also plotted as points are two mean values (values i and j) for four Indian wolves obtained from Lawrence and Reed's ratio diagrams. These latter fall vertically with respect to each other indicating that, while smaller than the standard, they have the same proportional relationship to it. The means for the four Near Eastern wolves, however, do not fall in a straight line with respect to the Figure 4.1 standard as also the extremes do not. Furthermore, since the standard used here is one of the four included in those ranges, it is possible to determine that it was one of the two smallest for each measurement, being the smallest in at least one case (value k).

As has been noted by Lawrence (1968: 43), muzzle shortening, thickening of the horizontal ramus of the mandible, and decrease in area of the ascending ramus of the mandible are all diagnostic of dogs. On the basis of these characters, the Yahya mandible can be identified as dog (Canis familiaris). In all dimensions except those of horizontal ramus thickness, the front part of the jaw is relatively small when compared with the Turkish wolf (values a, b, and c for the P/2, value d for the P/1-P/2 alveolar distance, and value o for ramus height between P/2 and P/3). In contrast, the ramus is relatively thick throughout (values i, j, k, l) as well as high (values m, n) and long (value e) in the area of the molars. Accompanying the relatively small front part of the jaw is a relatively small ascending ramus (as reflected by values f and g) and a narrower condylar process (value h). Although Lawrence did not use measurements to document her observation of decrease in area of ascending ramus, the fact that the dimensions taken here seem to reflect this phenomenon in a satisfactory fashion suggests that further investigations along these lines might prove useful for studying wolf to dog changes. From a mechanical point of view, the combination of a short, thick jaw and a relatively small ascending ramus is consistent with greater use of the mandible in a side-to-side direction in dogs than in wolves (following arguments made by Badoux 1975: 80-82) as well as with a less powerful bite.

As far as the loose teeth are concerned, although the broken (?)P/2 has the same breadth as that in the Yahya dog's jaw, its crown morphology is quite different (see description above). Having only one instead of two small accessory cusps, however, shows that it did not

come from a jackal, while it is too small and gracile for wolf and too large for fox. Likewise, the rather oddly shaped and badly broken M1/ is too gracile to have come from a wolf but too large to be jackal. The same can be said of the canine. Given the amount of morphological variation that can occur in dogs, identification as Canis familiaris for the above specimens seems likely but cannot be considered as definitely established.

As far as the post-cranial specimens are concerned, to judge from their sizes and morphologies it is unlikely that any came from a jackal (Canis aureus). From measurements listed in Harrison (1968: 198, 203) and body weights and dimensions quoted by Roberts (1977: 95, 98) it appears that no asiatic jackal equals in size even the smallest of the asiatic wolves (we are excluding consideration of possible hybrids), and while individual dimensions for certain jackal elements can reach the size of those for pre- and proto-historic Middle Eastern dogs, not all of them will do so for any given element (e.g., Meadow 1983: fig. 2). Since little work has been done to characterize the post-cranial skeleton of the different forms of Canis, however, it is conceivable that the relatively small and slender Yahya phalanges, for example, came from a very large jackal. Agruing against this possibility is the fact that all of the other post-cranial specimens relate to the wolf standard almost within the range defined by phalanx length. All are markedly smaller than the Turkish standard and smaller than the average of 4 Indian wolves as represented by 2 mandibular dimensions (i and j). Given these relationships of relative size and shape, it is likely that all the post-cranial specimens came from dogs although a definite

identification is not possible.

In sum, on the basis of size and/or morphology, all specimens from R37 and Yahya appear more likely to have come from dogs (Canis familiaris) than from jackals (C. aureus) or wolves (C. lupus). The mandible, however, can positively be identified as dog. The earliest Canis specimen comes from an upper level of R37 and dates to c. 4800 bc (5730 half-life; calibrated: c. 5500 BC) which is not particularly early for domestic dog anywhere in Eurasia.

4.4.4.2. Canidae, Vulpes sp. (fox) and Vulpes vulpes (red fox)

Two teeth of fox come from Tepe Yahya and an originally complete but now somewhat broken mandible and single P/1 from Tepe Gaz Tavila-R37:

Yahya: 1910-15 (VC): permanent canine, (?) upper left; enamel on crown largely gone, root closed.

3767-45 (IVC.1): left maxillary M1/; surface too badly eroded for reliable measurements.

R37: 3529-4: right mandible, middle of ascending ramus - P/2 intact, canine loose; illustrated in Plate II; measurements (measurement numbers below follow von den Driesch 1976: 60-61):

9) alveolar length P/2-M/3 = 51.9 mm;

10) alveolar length M/1-M/3 = 24.0 mm;

12) alveolar length P/2-P/4 = 28.4 mm;

crown length P/2 = 8.0 mm;

crown breadth P/2 = 3.0 mm;

crown length P/3 = 9.0 mm;

crown breadth P/3 = 3.1 mm;

crown length P/4 = 9.0 mm;

crown breadth P/4 = 3.6 mm;

13) crown length M/1 = 14.6 mm;

13) crown breadth M/1 = 5.7 mm;

14) alveolar length M/1 = 3.8 mm;

15) crown length M/2 = 6.6 mm;

15) crown breadth M/2 = 4.7 mm;

16) crown length M/3 = 3.4 mm;

16) crown breadth M/3 = 3.1 mm;

greatest latero-medial thickness at base of ascending ramus including dorsal margin of masseteric fossa = 6.0 mm;

17) greatest latero-medial thickness below M/1 = 6.5 mm.

greatest latero-medial thickness below P/3 = 5.1 mm;

least horizontal ramus height from behind M/3 to basal margin taken on lingual side = 13.6 mm;

19) height of horizontal ramus taken on lingual side behind M/1 and at right angles to basal border = 13.3 mm

20) height of horizontal ramus taken on lingual side between P/2 and P/3 and at right angles to basal border = 10.8 mm.

21) height (length) of canine = 26.7 mm

3545-7: right P/1 (likely to go with mandible 3529-4, although is said to come from a stratigraphically much later locus): crown length = 3.7 mm, crown breadth = 2.5 mm.

Of these 4 fox specimens, only the mandible from R37 can be confidently identified to species: Vulpes vulpes. The P/1 is likely to have come from that same mandible (assigned a later locus label in error?), the upper canine comes from a somewhat smaller fox than the mandible, and the upper first molar, although severely eroded, is from a considerably smaller fox.

Only the red fox (Vulpes vulpes) is recorded as occurring in the Yahya area today, and an individual of this species, captured by local workmen, was photographed in 1973 (identification based on coloring and configuration of the head and ears following Roberts 1977: 101). Both the somewhat smaller sand fox (V. rueppelli Schinz, 1825) and the even smaller Afghan fox (V. cana Blanford, 1877), however, are found just to the east in Iranian Baluchistan (Corbet 1978: 163-164, 259); Lay 1967: 204-207). There is considerable individual size variation in foxes, and thus overlap between the different species could be expected to occur. Harrison (1968: 208-211), however, reports mandibular canine to M/3 measurements for 94 red foxes and 10 sand foxes from Arabia and the Near East and there is no overlap in size, the smallest red fox dimension being 57 mm, the largest sand fox 55 mm. If we allow a conservative 15 mm for the missing canine-to-anterior-border-of-P/2 distance of the R37 specimen and add it to the 51.9 mm P/2 to M/3 length, the resulting c. 67 mm is toward the upper end of Harrison's

57-70.3 mm range for red foxes. Other measurements, when compared with those reported by Kusatman (1983: 60-61) for aceramic Cayonu (southeastern Anatolia) and by Stampfli (1983: Table 32) for 7th millennium Jarmo and modern northern Iraq, place the R37 specimen within the ranges of prehistoric and modern red foxes in those areas as does comparison of the R37 specimen with the mandibles of three red foxes from Anatolia (Museum of Comparative Zoology 51510, 51511, 51516). These Turkish specimens have P/2-M/3 alveolar lengths of 51.4, 52.5, and 51.2 mm, respectively, compared with 51.9 for the R37 jaw.

In contrast to the R37 specimen, the upper first molar from Yahya, although too badly eroded for measurement, appears considerably smaller than the comparative material of red fox examined. We could thus be dealing with another species of fox although, given the scarcity of comparative material of sand and Afghan foxes, no definitive statement can be made. Even less can be said about the upper canine, only that it comes from a fox somewhat smaller than the one that gave us the R37 mandible.

The red fox is found in a wide range of habitats throughout Iran and all of the Middle East. It is truly omnivorous, feeding on fruit, insects and other invertebrates, mice, small birds, lizards, fish, grain, and carrion (Lay 1967: 205). Roberts (1977: 102) notes that it occurs throughout the mountainous area of Baluchistan in both the valleys and on the higher slopes. Individuals have been sighted in the Yahya area. In contrast, the sand fox appears to prefer desert regions where it is found sparsely distributed throughout the southern part of the Middle East (Harrison 1968: 214-215, Lay 1967: 207, Roberts 1977:

105). It would be more surprising to find this animal in the Yahya area and particularly in the Soghun valley. The Afghan or Blanford's fox (V. cana), however, might be expected near Yahya. Roberts (1977: 105) notes that it "is confined to mountain steppe regions characterized by barren rocky hills interspersed with stony plains and small patches of cultivation. It appears to avoid the higher mountain ranges as well as lower warmer valleys. It occurs mainly in south west (Pakistani) Baluchistan .... Elsewhere it appears rare in Iran where it has only been collected from Fars and Khuzistan (Lay, 1967)." On both environmental and zoogeographic grounds, therefore, this fox would fit well in southeastern Iran. Since the Afghan fox is apparently even smaller than the sand fox, perhaps the upper first molar from Yahya came from an individual of this species.

4.4.4.3. Ursidae, (?)Selenarctos thibetanus (Asiatic black bear)
The one ursid specimen from Tepe Yahya comes from a IVC.2 locus (3761-50). It is a left distal radius that appears to have been both carnivore and rodent gnawed (Plate III). The only measurements possible to take on this fragmented bone are shaft dimensions (at approximately right angles to each other) of 25.5 and 15.5 mm at a point some 90 mm from the distal margin of the proximo-distally oriented articular facet for the ulna.

In the absence of good comparative material from the region and given the fragmented nature of the specimen, definitive identification to genus Ursus or to genus Selenarctos must remain open. Furthermore, from a zoogeographic standpoint, there is presently no

evidence as to whether the brown bear Ursus arctos ever extended so far to the southeast of its known range in the Zagros or whether the Asiatic black bear extended so far to the west from Baluchistan. The latter, however, seems more likely.

Black bears are reported by local people to raid date groves in the Jaz Murian depression of Iranian Baluchistan in the vicinity of Damin, Iranshahr, Bampur, and Geh (Lay 1967: 234), and there seems little reason for them not to be (or have been) at the western end of that same inland drainage system in the Jiruft area, just over the mountains east of the Soghun valley. Furthermore, Roberts (1977: 110) notes that, in Pakistan, the "Baluchistan subspecies is a relict isolated population adapted to surviving in a very arid treeless environment and is of great ecological interest." He goes on to say "it is typically associated with the Dwarf Palm (Nannorrhops ritchieana). It has been observed to dig out and eat the thick starchy rhizomatous stems of this palm as well as eating its fruit and the association of this plant with the distribution of this subspecies of the bear is no doubt ecologically significant and has enabled its spread southwards through barren hills devoid of forest." There were (at least between 1967 and 1975) a grove of what have been identified as dwarf palm at the entrance to the Soghun valley in the south as well as at other points on the Rud-i Gushk drainage with available water (Snead and Durgin 1975: 14). One could thus well expect the Asiatic black bear to be present in the area, at least up until the recent past, an assessment shared by the German engineer A. Houtum Schindler who passed through the Shah Maran - Daulatabad basin in early April of 1879. He noted: "In den Gebirgen von

Urzu sollen Leoparden, Geparden und schwarze, weissbrustige Baren hausen" /In the ranges of Urzu (to the north and west of the Shah Maran - Daulatabad basin) must dwell leopards, cheetahs, and black, white-breasted bears/ (Schindler 1881: 340; reference courtesy of Martha Prickett).

4.4.4.4. Viverridae, Herpestes auropunctatus (small Indian mongoose)

A complete sacrum of the small Indian mongoose (epiphyses fused) comes from Yahya IVC.2 (locus 3737-41). Measurements are: GL = (19) mm, PL = 17.4 mm, GB = 16.8 mm, BFcr = 6.2 mm, HFcr = 3.0 mm. Roberts (1977: 132-133) notes that H. auropunctatus is more commensal than its larger relative H. edwardsi Geoffroy, 1818 and, when living around villages, feeds largely on domestic rats and mice. Both species are found through Iran and into South Asia.

4.4.4.5. Felidae, Felis (?)chaus (jungle cat)

A 3rd or 4th cervical vertebral centrum of a felid (epiphyses fused) comes from a Yahya VIA locus (849-3). Measurements are: PL = 11.5 mm, BFcr = 11.0 mm, BFcd = 11.5 mm, HFcd = 10.7 mm. Largely on the basis of size it is thought that this specimen comes from a jungle cat. In the absence of comparative measurements, it appears too large to be from F. silvestris Schreber, 1777 or domestic cat and probably too small for F. caracal Schreber, 1776. Felis chaus specimens are rare in modern comparative collections, however, and it was not possible to find a skeleton with which to compare the Yahya specimen. The jungle cat is an adaptable small cat that, while favoring swamps and reed beds, can be

found throughout its extensive range in relatively open, barren areas with only sparse vegetation cover (Roberts 1977: 141). It would have been at home in the Soghun valley particularly if the southern end were marshy at times.

4.4.4.6. Felidae, Panthera leo (asiatic lion)

A proximal right radius (fused) from Yahya IVC.2 (467-1) can be identified as coming from lion (Plate III). Measurements of the specimen are approximate since the margin of the articular surface has been somewhat eroded: Bp = (34) mm, Dp = (25) mm. These dimensions are nearly the same as those taken from the right radius of the smallest African lioness in the collections of the Museum of Comparative Zoology (MCZ 20976: Bp = 34.5 mm, Dp = 25.5 mm). In six modern African lion specimens examined (including both males and females), the articular area with the ulna on the volar side of the radius (beginning about 15 mm distally from the proximal articular surface) projects less volarly and is less well delineated and developed than it is in three tiger specimens. The Yahya radius agrees with lion in these characters.

The lion is now extinct in the Palearctic Region but occurred "formerly in all non-desert parts of North Africa and S.W. Asia" (Corbet 1978: 185). Its last reported sighting in Iran came in Khuzistan on May 22, 1942 (Heany 1944: 467) although it had earlier been reported also in Fars province (summarized by Lay 1967: 235). A relict population survives in the Kathiawar peninsula in western India (Corbet 1978: 185). A second phalanx of lion was identified by Bokonyi (1967: 310)

from period I at Tal-i Iblis (south of Kerman, north of Yahya, approximately contemporary with Yahya VIIB-A).

4.4.5. Perissodactyla

4.4.5.1. Equidae, Equus (half-ass/ass/horse/hybrids) and Equus hemionus (half-ass)

A total of 33 Equus bones and teeth have been identified from the south side of Tepe Yahya for periods VII through IVC. These are arrayed by major temporal division and by skeletal part in Table 4.5. No specimens were identified from Tepe Gaz Tavila-R37. Most parts of the body are represented in the collection (the most notable exception being vertebrae), with the first phalanx being the most commonly occurring element. No unfused epiphyses or diaphyses were found, a sphenoid fragment and a pair of lower deciduous molars being the only elements that can be said with assurance to have come from young animals. For the 8 teeth, enamel fold patterns are depicted in Figure 4.2 and measurements are listed in Tables 4.6 and 4.7. Selected specimens are illustrated in Plates IV and V. Dimensions for 14 of the post-cranial specimens are reported in Table 4.8. Measurement definitions can be found in Turnbull (1986) for the teeth and in Eisenmann (1986) for the skeleton with additional dimensions noted in Meadow (1986a). In view of the value for comparative purposes of a comprehensive set of measurements (as reflected in Meadow and Uerpmann 1986), more rather than fewer dimensions are reported even though not all will be used here.

Three species of Equus (assigned to three different subgenera) are generally recognized as being present in the Middle East today. These are the horse (Equus (Equus) caballus Linnaeus, 1758), the donkey (Equus (Asinus) asinus Linnaeus, 1766), and the half-ass (also known as the asiatic ass or onager, Equus (Hemionus) hemionus Pallas, 1775). The horse and donkey are represented only by their domestic forms in the region, their wild relatives (? ancestors) being restricted, respectively, to Central Asia (Equus (Equus) ferus Boddaert, 1785) and to North Africa (Equus (Asinus) africanus (von Heuglin & Fitzinger, 1866), attribution following Groves 1986: 27). The half-ass is still found throughout the Middle East, but what once may have been a continuous range is now fragmented into a number of discrete populations some of which have been assigned subspecific status (Corbet 1978: 194, Groves 1986: 24-27). Thus, there is E.h. hemippus Geoffroy, 1855 in northern Syria and Mesopotamia (now extinct); E.h. onager Boddaert, 1785 on the Iranian plateau and western Baluchistan; E.h. khur Lesson, 1825 in eastern Baluchistan and northwestern South Asia; and E.h. kulan (Groves and Mazak, 1967) in southern Turkmenia and northwestern Afghanistan. Osteological materials and particularly post-cranial specimens of most forms of hemione are rare in museum collections, a circumstance that makes it difficult to define ranges of variation within the species as a whole, never mind characterizing the different subspecies. From what little we know, however, the smallest hemiones occur in the west (E.h. hemippus) and the largest in the east (E.h. hemionus in Mongolia) with the Iranian plateau and South Asian forms falling in the middle (Groves and Mazak

1967: 331-333).

All of the Yahya specimens discussed here come from middle-sized Equus. There are no bones from any animal so small as the domestic donkey of the Middle East, so large as the domestic horses of the region today, or so large as prehistoric wild horses such as those represented by the few bones reported by Boessneck and von den Driesch (1976) and Rauh (1981: 100-116) from Anatolia (fourth and third millennia B.C.) or noted by Turnbull (1986: 326, 357-365) for Palegawra Cave (terminal Pleistocene). Although examination of equid bones from later periods at Tepe Yahya is only in its initial stages, from first millennium B.C. Period III deposits come both large robust and small gracile specimens together with bones of the middle range like those dealt with here. In the absence of any such obviously horse or donkey material in the collection at hand, identification as Equus hemionus seems most likely. This identification is confirmed by consideration of the morphology, size, and proportions of individual skeletal parts.

Cranium: Two skull fragments, 3 maxillary cheekteeth, and 5 mandibular cheekteeth come from Equus. The petrous (552-13) comes from a medium-sized animal. The sphenoid (1914-2) is from a young animal, the basisphenoid and basioccipital not being fused. Such fusion takes place in domestic horses between 3 and 5 years of age (Habermehl 1975: 48).

Of the 8 teeth, 3 mandibular and 3 maxillary are worn permanent cheekteeth while 2 from the same mandible are worn deciduous molars (dP/2 and dP/3: 1934-12 and 1934-13). The enamel fold patterns as revealed on the occlusal surfaces of all of the teeth are illustrated in

Figure 4.2. The fold morphologies of the deciduous teeth are similar to those illustrated by Stehlin and Graziosi (1935: fig. 9B) for Equus hemionus. Data published by Eisenmann (1981: 144 and table 30) confirms the impression conveyed by Figure 9B in Stehlin and Graziosi (1935) that the milk teeth of the domestic ass (E. asinus) tend to be relatively as well as absolutely narrower (bucco-lingually) than do those of hemiones. The Yahya teeth are long and wide and thus probably not domestic ass. With the exception of the length of the postflexid of the dP/2, however, their dimensions also fall with the ranges given by Eisenmann (1981: table 32) for E. przewalskii (read "E. ferus przewalskii"). The fact that the Yahya dP/3 has a marked protostylid, the dP/2 a short postflexid, and both teeth moderately penetrating protoconid-hypoconid valleys helps confirm identification as hemione rather than as horse (Eisenmann 1981: 146-147).

Of the 3 lower permanent lower cheekteeth, 2 come from a single mandible of an adult, but not old, individual (P/4: 1930-29, M/1: 1932-53). The measurements of both these teeth are all larger than those given by Eisenmann (1981) for E. asinus but fall within the ranges for E. hemionus, E. przewalskii, and E. caballus. The morphology of the enamel folds, however, is typically hemione (Stehlin and Graziosi 1935: figure 5, Turnbull and Reed 1974: plate V.b, and Eisenmann 1981: plate 2.3 for hemione compared with Eisenmann 1981: plate 2.5 and specimens in the Museum of Comparative Zoology for horse). In each of the Yahya teeth, the lingual borders of the metaconid and metastylid are straight or slightly convex, and the valley between them, while fairly deep, is not "U"-shaped as is common in

horses. Instead, it is more of an open "V"-shape as in asses and hemiones. The protoconid-hypoconid valley, while pointed and, in the M/1, reaching the level of the end of the preflexid, does not pass between the preflexid and postflexid nor is there any caballine fold. There are no obvious signs of a protostylid although both teeth are broken on the occlusal surface at that point. The last lower cheektooth (784-4) is only a fragment that includes the hypoconid, the postflexid, and a relatively shallow protoconid-hypoconid valley with caballine fold. This last trait is present, although rare, in hemiones (Eisenmann 1981: 145), and thus there is no reason not to identify this tooth as also coming from Equus hemionus. No positive determination of place in jaw can be made for this specimen although P/3 or P/4 seems most likely.

The 3 fragmentary upper cheekteeth are missing most or all of their buccal margins (and styles), and 2 specimens (1372-6 and 1320-9) are missing their distal faces as well. What are probably a P4/ or M1/ and an M3/ (773-6 and 1372-6) are heavily worn and came from old individuals. The third tooth, again a P4/ or M1/, is fully in wear but is high crowned, thus coming from a younger individual than the other two. The protocones of all three teeth are elongated, extend more distally than mesially, and have concave lingual margins. A remnant of a caballine fold is present on specimen 773-6 in the form of a small enamel island. The distal margins of the prefossettes of the two more heavily worn teeth have three folds each, while the mesial margins of the postfossettes have only one fold each. Folding is also present in the fossette margins of the least worn specimen (1320-9), but it is not

possible to count well-defined individual folds. Based on their dimensions, where measurable, these teeth appear too large to have come from domestic ass, but neither on the basis of size nor on the basis of morphology can identification as horse be entirely excluded (Eisenmann 1980: 79-107, 1986: 75).

Bokonyi (1967: 311-312) identified true horse for Tal-i Iblis period I (located southeast of Kerman, Iran, and approximately contemporary with Yahya VIIB-A) on the basis of upper cheekteeth with short protocones and "a simple (enamel) pattern typical of horses of the oriental type. Fundamentally they resemble Duerst's Anau horse and Amschler's Shah Tepe horses." There has been considerable discussion of the identification of the Anau and Shah Tepe material. Lundholm (1949: 154-155, 247), for one, believed that the Anau material was not horse but hemione, this on the basis of the dimensions of the first phalanges. As far as the teeth are concerned, both relatively and absolutely short protocones are also found in hemiones (Eisenmann 1980: compare tables 44, 46, and 47). Since Bokonyi gives neither measurements nor illustrations of the teeth, it is not possible to directly compare the Iblis and Yahya specimens.

Radius: The size of the Yahya distal radius (Table 4.8: 1346-1 and Plate IV) falls within the range of specimens identified by Bokonyi (1986: fig. 3) as Equus hemionus from Umm Dabaghiyah, Iraq (sixth millenniumn bc), although the Yahya specimen is somewhat less deep (dorso-volarly, dimension Dd) in relation to its breadth (medio-laterally, dimension Bd) than the majority of the Iraqi specimens. Also evident from Bokonyi's figure is the fact that the

Yahya radius is wider than any equid specimen from the somewhat earlier site of Muraibit in north Syria. Ducos (most recently in 1986), has identified the Muraibit material as Equus africanus. On the basis of size alone, therefore, the Yahya distal radius can be identified as hemione. This identification is confirmed by the morphology of the distal articular surface which is fairly "blocky" in appearance (as opposed to "elongated" in asses) with a lateral articular facet that is well developed and oriented dorso-volarly (as opposed to sometimes being reduced and oriented somewhat obliquely in asses). (See Meadow 1986: 275 for discussion of these characters.) The proximal radius (1937-34) is too fragmentary to permit specific identificaion on the basis of either morphology or measurement.

Tibia: The 2 distal tibiae (877-9 and 1935-25) are similar in both morphology and dimensions (Table 4.8 and Plate IV). Each bears a well-marked, fairly narrow groove (7.5-8.0 mm wide) on the medial side through which the musculus flexor digitalis pedis longus runs in the living animal. On both dorsal and plantar sides of the groove near its distal end are medially projecting ridges of bone that tend to overhang the channel somewhat, particularly on the dorsal side. These traits are viewed by Boessneck and Kokabi (1981: 97) as characteristic of hemiones in contrast to asses where the groove is poorly developed. In tibiae of horses examined in the Museum of Comparative Zoology and other collections, the groove is present but tends to be wider (dorso-plantarly) in relation to its depth (medio-laterally) and, at least in some examples, seems to be set somewhat more plantarly. On this basis the two Yahya specimens clearly seem to have come from

hemiones. This identification is confirmed by the breadth and depth dimensions of the specimens that place them in the middle of the scatter plotted for Umm Dabaghiyah by Bokonyi (1986: fig. 4).

Metapodials: The distal ends of the two Yahya distal metatarsal fragments (1918-130 and 1923-21, see Plate V), when viewed from the lateral or medial side, are offset somewhat plantarly from the line of the shaft. This morphology is characteristic of hemiones and not of asses where the distal end lies directly in line with the shaft (Meadow 1986: 276, based on observations made by H.-P. Uerpmann). Breadth and depth dimensions of these two specimens (Table 4.8) lie within the ranges illustrated by Turnbull and Reed (1974: fig. 5; also Turnbull 1986: 341) for Equus hemionus from Palegawra Cave and by Bokonyi (1986: fig. 6) for specimens from Umm Dabaghiyah as well as within the ranges documented by Eisenmann for modern E.h. onager (Eisenmann and Beckouche 1986: table 6). Those dimensions that could be taken on the proximal metacarpal III fragment from Yahya (720-6) also fall within the range of modern onagers. In sum, all of the better preserved and measurable metapodial III specimens from Tepe Yahya are clearly hemione, as are the metapodial specimens from Tal-i Iblis documented by Bokonyi (1967: 311). The remaining 3 proximal metatarsal fragments from Yahya (1913-17, 1931-35, 1931-36) also come from medium-sized equids, probably hemiones.

Phalanx 1: Measurements taken on the 2 complete first phalanges from Yahya (1906-2 and 1932-35 in Table 4.8; see also Plate V) permit comparison of these bones with a large sample of modern equids plotted on a scatter diagram by Compagnoni (1978: fig. 4) and, using different

dimensions, with material from Palegawra Cave (Turnbull and Reed 1974: fig. 3). In both instances the lengths of the Yahya specimens place them near the middle of the range defined for Equus hemionus, but their breadth dimensions are equal to or greater than breadths plotted for that species. The breadths and lengths are greater than any plotted by Compagnoni for E. asinus, and the breadths are considerably less than any plotted for E. caballus and E. przewalskii. These patterns are confirmed when the Yahya dimensions are compared with those compiled by Eisenmann for modern Equus species (Dive and Eisenmann, in press) and by Turnbull (1986: 341) in her reanalysis of the Palegawra Cave material. Again the breadth of the Yahya specimens is particularly noteworthy. Like the distal metapodial 1918-130, these two Yahya phalanges came from rather heavily built hemiones. The 5 additional, fragmentary, first phalanges from Yahya (717-10, 1918-131, 1930-119, 1933-17, 1936-38) are of sizes similar to the 2 more complete specimens and thus probably best identified as hemione.

Phalanx 2: Measurements listed in Table 4.8 for 2 reasonably complete, probably anterior, second phalanges almost all lie within the ranges reported by Turnbull (1986: 362) for Palegawra Cave hemione anterior second phalanges. The only exception is the wide distal breadth (Bd) of Yahya specimen 802-12, a bone that, like the complete first phalanges, comes from an animal of average height but of heavier build. The second Yahya specimen (1936-41; see Plate V) is somewhat less broad, being average or only a bit above when compared with the Palegawra material. Both Yahya specimens can be confidently identified as hemione.

In sum, there is no evidence for any species other than Equus hemionus in the small collection of Equus remains from periods VII-IVC as represented on the south side of Tepe Yahya. These animals would have been at home on the gently sloping Soghun valley floor, just as they were until very recently in intermontane valleys and inland drainage basins throughout Baluchistan (Roberts 1977: 161) and much of Iran (Lay 1967: 222). The fact that no specimens were identified from Tepe Gaz Tavila-R37 is remarkable since the Shah Maran-Daulatabad basin would also have provided suitable habitat for hemiones.

4.4.6. Artiodactyla

4.4.6.1. Camelidae, Camelus sp. (camel)

A single Os carpale IV (4th carpal) of camel was identified from a Yahya VIIB.2-VIIA locus (1935-7). The creamy white color and the rather fresher appearance of the surface of this specimen when compared with others from the same locus indicate that it is probably intrusive. Later deposits at Tepe Yahya, particularly those between Periods IVA and III, have yielded a considerable number of camel bones.

4.4.6.2. Suidae, Sus scrofa (boar/domestic pig)

The single pig tooth identified from Gaz Tavilah-R37 and the 32 bones and teeth from Tepe Yahya, south side, periods VII to IVC are arrayed by period and skeletal part in Table 4.9. Of these, 11 were measured, the dimensions appearing in Table 4.10. Table 4.11 lists selected measurements of a modern adult female wild boar from west of Elazig,

Turkey (Museum of Comparative Zoology 51621) that were used for preparing the difference of logarithms diagrams (Figures 4.3, 4.4, 4.5). Values computed to make those diagrams appear in Table 4.12. All of the Yahya post-cranial measurements are smaller than the comparable ones from the Turkish specimen while one mandibular first molar from Yahya IVC.1 is larger. Since size diminution is said to accompany pig domestication (e.g., Flannery 1983, Stampfli 1983: 446) these smaller bones raise the question of whether or not we are dealing with domestic pig at Yahya. Although pigs had diminished in size sufficiently to be called "domesticated" in southeastern Europe and the western part of the Middle East by the end of the 7th millennium bc (e.g., Argissa-Magula in Thessaly: Boessneck 1962; Jarmo in eastern Iraq: Stampfli 1983: 445-447), the same pattern cannot be assumed for the east especially at sites where pig remains make up such a very small fraction of the total faunal collection.

The difficulties in dealing with size change in pigs are twofold: these animals vary considerably in size across their range in the wild (Groves 1981) and there has been little data published on their post-cranial skeleton. Most measurements for modern pigs are cranial (e.g., Harrison 1968: table 174, Groves 1981: table 4) and/or teeth (ibid., Flannery 1983: table 3). Furthermore, published measurements of individual teeth are exclusively lengths, a dimension that decreases with age particularly in the M1 and M2 as the teeth wear against each other mesio-distally. Thus the M/1 from Yahya IVC.1 is considerably longer than that from any modern wild specimen reported by Flannery (1983: table 3), but it is newly erupted (there is hardly any wear

evident on the crown) whereas all of Flannery's measurements are taken from older animals in which the M/2 and M/3 have also erupted. Breadth dimensions for the first two molars are probably less variable (Sebastian Payne, personal communication).

Little is known about the modern wild pigs of southeastern Iran because of a total absence of material. Indeed, the 1981 summary by Groves has a big question-mark in the eastern Iran area of the map (figure 6) showing the distribution of the subspecies of Sus scrofa. We thus do not know whether the modern pigs of the Yahya region are smaller animals like those from the Pakistan / northwest India area (S. s. davidi Groves, 1981) or larger like those from the mountains of western and northern Iran (S. s. attila Thomas, 1912). The MCZ specimen no. 51621 should belong to a third subspecies S. s. lybicus Gray, 1868 that Groves (1981: figure 6) shows as the only race in Turkey. To judge from his statistics (Groves 1981: tables 4 and 5), individuals of that subspecies are smaller than those of the attila race but considerably larger than those of the davidi race. Greatest length of skull dimensions (in millimeters) for boar from selected arr include the following:

Subspecies	male	female	f/m x 100	m x 94.8%
S.s. lybicus (Turkey, Israel)	421.4 mm s.d. 17.66	379.5 mm	90.1%	399.5 mm (=MCZ 51621)
S.s. attila (Iraq)	454.3 mm s.d. 7.37	400.0 s.d. 12.03	88.0%	430.7 mm (log dif.= +.033)
S.s. davidi (NW South Asia)	365.2 mm s.d. 11.90			346.2 mm (log dif.= -.062)
S.s. ?subspecies (region of Yahya)	(399.5) mm			(378.7) mm (log dif.= -.023)

From the meager information on body size summarized by Harrison (1968:

372-374) and Roberts (1977: 164), it appears that the relative skull sizes approximately reflect relative body sizes. If one can assume the existence of a size cline across southern Iran from the large attila in the west to the small davidi in the Indus Valley, pigs in the Yahya area might be expected to fall between the two extremes and thus be somewhat, but not a great deal, smaller than animals of the lybicus (Turkish) race. For this reason, the rather large Turkish female from the MCZ might be approximately equivalent to an average male of southeastern Iran. This approximation is reflected in the listing above.

Figure 4.3 shows selected dimensions from Table 4.10 plotted in relation to the Turkish female wild pig (MCZ 51621) using the difference of logarithms technique that was introduced in section 4.4.4.1. Here, however, log differences for various skeletal parts from one site are placed on a single line to show ranges in relative size. Plotted on separate lines are dimensions for Jarmo pigs (eastern Iraq, 7th millennium bc; post-cranial dimensions from Stampfli 1983: table 28; tooth dimensions from Flannery 1983: tables 6 and 7); Hajji Firuz pigs (nortwestern Iran, 6th millennium bc; Meadow 1983: figure 3, table 26), Korucutepe pigs (southeastern Anatolia, 2nd and 1st millennia BC; Boessneck and von den Driesch 1975: tables 26, 37), and Mehrgarh pigs (central Pakistani Baluchistan, 7th - 3rd millennia bc; Meadow, unpublished data). The data from which this and subsequent log difference diagrams for pigs were constructed are listed in Table 4.12.

On the face of it, Figure 4.3 shows the Yahya pig values to cover a range only somewhat more restricted than that covered by the Jarmo and

Korucutepe material. The median of the distribution is below (smaller than) those for Jarmo and Mehrgarh but above (larger than) those for Korucutepe and Hajji Firuz. Meadow (1983: 394) concluded that the three Hajji Firuz specimens represented by points to the right of the zero-line came from wild boar. Likewise, Boessneck and von den Driesch (1975: table 37) identified the similarly placed Korucutepe specimens as wild. To judge from his comments, Stampfli (1983: 447) would define an area of size overlap between wild and domestic pigs that would range from about +.020 to -.005 on Figure 4.3 for post-cranial bones and from about -.015 to -.040 for the lower third molar. This would suggest that the Turkish pig used here as the standard has either a relatively large third molar or relatively small post-cranial skeleton. It might also suggest that the European pigs upon which Stampfli bases some of his ranges are not strictly comparable to those from the Middle East or it might indicate a change in size and proportions of Middle Eastern wild pigs through the course of the Holocene.

In an attempt to adjust for some of the difficulties introduced by Stampfli's observations, Figure 4.4 was created. For each of the sites except Korucutepe (which lies in the range of Sus scrofa lybicus), correction factors were calculated from the data in the skull size listing above under the following assumptions: pig remains from a particular site are best compared to a standard approximating the size of the average wild pig of the area where the site is located; greatest length of skull provides a reasonable representation of body size (see discussion above); the MCZ Turkish female falls in the size range of a large female or small male Sus scrofa lybicus and thus is an "average

wild pig" for that subspecies; the skull size of the MCZ female is 94.8 percent of the average male S.s. lybicus skull size; 94.8 percent of average male skull size provides a useful approximation of average for the other subspecies. For the Yahya area, the size of an average male is assumed to be the size of the Turkish female (see discussion above). Therefore, skull length for the "average wild pig" of that area was calculated as 94.8 percent of the Turkish female.

Once the figure for "average wild pig" skull of an area was obtained, the difference of logarithms between that skull and the Turkish female was calculated and that figure used to "correct" the differences of logs obtained for the post-cranial bones from the various sites. Thus, no correction was made for Korucutepe, .033 was subtracted from each post-cranial log difference for Hajji Firuz and Jarmo (both within the range of Sus scrofa attila), .023 added for Yahya, and .062 added for Mehrgarh (within the range of S.s. davidi). (See Table 4.12.) No corrections were made for tooth measurements because the data in Groves (1981: tables 4 and 5) show much less variation in length of M/3 than in skull length for the subspecies involved. Nevertheless, to check for the possible influence of tooth measurements, a separate figure was drafted including post-cranial dimensions only (Figure 4.5). Comparison of Figures 4.4 and 4.5 shows that while the overall range of values is constricted by removal of points on both ends that represented teeth, the locations of the medians is little different. Length of upper third molar is particularly variable, especially for Jarmo.

Comparing Figures 4.3 and 4.4, the most noteworthy difference concerns Mehrgarh, only 6 instead of 18 points falling to the left of

the zero-line. On this basis, an argument can be made that the pigs from that site were wild. For Hajji Firuz and Jarmo, the distributions and medians in Figure 4.4 are somewhat to the left of where they are in Figure 4.3, the median for the former site approximating that for Korucutepe (the distribution for which is the same in the two figures). The bones from Jarmo remain larger, on the whole, than those from either Hajji Firuz or Korucutepe. For Yahya, while the distribution and median are farther to the right in Figure 4.4 than in 4.3, the change is not all that great. Nevertheless, the situation has been clarified somewhat. The 6 largest bones (farthest to the right) clearly could have come from wild animals. Of the 4 remaining points, the 3 leftmost represent ulnae, the state of fusion of which cannot be determined because the epiphyseal area of the olecranon is broken off in each case. The non-dense nature of the periosteal surface of each bone, however, suggests that they came from quite young animals. In contrast, the fourth smallest bone, a pelvis from Yahya VB, is clearly fused. Although the rim of the acetabulum has been considerably altered by rodent gnawing, the dimensions could not have been very much greater than those reported in Table 4.10. If this specimen came from a wild animal, it was a very small one indeed.

Given the very small number of pig bones from prehistoric levels at Tepes Gaz Tavilah-R37 and Yahya, one can propose that these animals did not play a very important part in the daily life or diet of the human inhabitants of the sites. Although there are no wild boar in the Yahya area today, to judge from their modern behavior in neighboring Pakistan (Roberts 1977: 165), they would have been at home in the wetter and

better vegetated parts of the Soghun valley and Shah Maran-Daulatabad basin where they would have profitted from raiding the crops of the local populations. It seems unlikely, however, that local wild pigs could have been very numerous unless there were considerably larger and more densely vegetated areas than there are presently in the Soghun valley and the Shah Maran-Daulatabad basin. None of the archaeological specimens comes from an animal that, demonstrably, was fully adult at death and many come from what clearly were young individuals (see Table 4.9). If the pigs of Yahya were fully domestic and genetically isolated from the wild population, one would expect many more of their bones as well as a bone-size distribution more like that for Hajji Firuz. It is possible, however, that the occasional young wild pig was captured and kept around the village as a kind of pet until slaughter. It is also possible that a very few domestic pigs were kept and allowed to interbreed with the local wild population. Given the small size of the Yahya pig collection, it is difficult to say much about pig-human relationships except that the pigs were killed and presumably eaten young. To underline this last observation, one can note that the young pig axis from Yahya IVC.2 has multiple cut marks across its dorso-caudal surface.

4.4.6.3. Bovidae, _Bos_ sp. (cattle), _Gazella_ sp. (gazelles), _Capra_ sp. (goats), _Ovis_ sp. (sheep)

The vast majority of the bones and teeth recovered from Tepe Gaz Tavila-R37 and Tepe Yahya, south side, periods VII-IVC come from four genera of bovids. That being so, a separate chapter, Chapter 5, is

devoted to presentation and discussion of the remains of cattle, gazelles, goats, and sheep.

Chapter 5

THE ANIMALS: BOVIDS

5.1. INTRODUCTION

Four genera of bovid, Bos, Gazella, Capra, and Ovis, are discussed in this chapter. Because of problems of identification, however, the last two are presented together as "caprines". Specimens that could be identified only as "sheep/goat/gazelle" are presented with the gazelles. Sex ratios and age at death of cattle and caprines are dealt with in the sections that conclude this chapter. Measurements for cattle and caprine bones and teeth are listed in Appendix 2. Measurements for gazelle specimens are in Tables 5.8-5.10.

5.2. Bovidae, Bos sp. (cattle)

The 1548 bones and teeth from Tepes Yahya and Gaz Tavila-R37 that have been identified as Bos sp. are tabulated by element in Table 5.1. For discussion of these distributions, the reader is referred to Chapters 7 and 8. In addition, since cattle are by far the most frequently

represented large mammal in the collection (1548 compared with 33 equid, 1 lion, and 1 bear), most of the c. 2035 specimens from Yahya and the c. 185 bones from R37 that were identified only as "large mammal" almost certainly come from cattle. These include principally long bone and other fragments whose place in the skeleton could not be readily determined together with rib blades and broken pieces of vertebrae. No remains of water buffalo (domestic: Bubalus bubalis (Linnaeus, 1758) or wild: Bubalus arnee (Kerr, 1792)) or bison (wisent: Bison bonasus (Linnaeus, 1758)) were identified among those fragments with diagnostic features preserved (see Higham (1975) and Stampfli (1963) for discussion of some distinctions).

By the time of the founding of the settlements at Gaz Tavila-R37 and Yahya (5200-4900 bc), cattle were being kept by peoples from eastern Europe to the Indus Valley. In the west, excavations at the late 7th and early 6th millennium bc sites of Argissa-Magula in Thessaly (Boessneck 1962), Catal Huyuk in central Anatolia (Perkins 1969), and Bouqras in eastern Syria (Clason 1983), to name only three, have produced bones from relatively small, presumably domestic, cattle. The same can be said for Mehrgarh in Pakistani Baluchistan (Meadow 1984, 1984a). At all of these sites, the remains of both large (presumably wild) and small (presumably domestic) animals are found suggesting that cattle domestication could have taken place based on locally available wild stock. At Mehrgarh, in particular, size diminution could be charted over the course of the aceramic Neolithic (Period I), the size range and median stabilizing at a smaller size by the ceramic Neolithic (Period II, c. 5500-5000 bc; Meadow 1984a: figure 2). There is no such

obvious size decrease evident at Yahya, with the possible exception of a shift toward a smaller animal in Yahya IVC (see discussion below). Thus, although there are occasional bones from large, possibly wild, animals, it is clear that the peoples of Yahya area kept domestic cattle starting from the time of the earliest settled occupation known to date. Of interest is whether or not it is possible to determine the form of cattle kept and whether or not there is any change in the character of the cattle population through time.

In his Systema Naturae, the 10th Edition of which (1758) is considered the major starting point for zoological nomenclature (ICZN 1985: Article 3), Linnaeus gave two specific names to morphologically distinct forms of cattle that what we now know are a single biological species of domestic Bos: Bos taurus for the European flat-backed or taurine cattle and Bos indicus for the Asian and African humped or zebu cattle. The two "species" readily interbreed and the offspring produced are fully fertile, both facts known by the mid-nineteenth century (Darwin 1868: 83). More recently, chromosome studies indicate that both have identical karyotypes (2n = 60) with the exception of a small difference between the two in the morphology of the y-chromosome (Hsu and Benirschke 1968: folio 90, Kieffer and Cartwright 1968).

Emphasizing the morphological differences between the zebu and taurine cattle, authors beginning at least with Linnaeus have argued they were different species and thus had different ancestors. In his 1868 work on The Variation of Animals and Plants under Domestication, Darwin stated (pg. 80):

"When we consider the number of points in external

structure and habits, independently of their important osteological differences, in which they differ from each other; and that many of these points are not likely to have been affected by domestication, there can hardly be a doubt, notwithstanding the adverse opinion of some naturalists, that the humped and non-humped cattle must be ranked as specifically distinct."

The difficulty for Darwin and his contemporaries, however, was that, by the time he wrote, there was no living wild bovine that could be convincingly put forward as ancestral stock for the zebu. In the late ninteenth century, Rutimeyer (1877/8: 176-179) noted that the zebu, in certain respects, is morphologically similar to the gaur (Bos gaurus Hamilton Smith, 1827) and, more particularly, to the banteng (Bos javanicus d'Alton, 1823) and suggested that it probably derived from the latter, an opinion that was restated, without comment, by Lyddeker (1912: 153). This opinion began to lose ground shortly thereafter, however, based on clear differences in skull morphology and on the fact that banteng-zebu hybrid males are generally sterile (see Zeuner 1963: 238; Groves 1985: 432; and Gray 1972: 119). Instead of seeking a modern "ancestor", the search turned to the fossil record.

In 1859, Falconer gave the species name of namadicus to Pleistocene fossil Bos material from the Narmada River area of India (see Grigson 1973: chapter 5 for a review of the fossil material). More than 100 years later, Zeuner (1963: 239) felt able to cautiously suggest:

"In India...a closely related (to the European aurochs) wild cattle is found throughout the Pleistocene, Bos namadicus, and it is conceivable that the zebu is its direct descendant. Osteological characteristics are not distinct enough to prove such derivation conclusively, but the slenderness of the face, especially of the muzzle, and the comparatively small supraorbitals favour it."

Zeuner's position has since been argued most effectively by Grigson (1973, 1980, 1985) who has documented many cranial similarities between the ancient and modern South Asian forms. These, however, have not convinced every student of the matter. Thus Epstein and Mason (1984: 7) argue that Grigson's separation of Bos namadicus from Bos primigenius Bojanus, 1827 (the Palearctic wild cattle or aurochs) on the basis of the "supracristal portion of the occiput overhanging or not overhanging the infracristal portion" is merely the result of horn shape and orientation "and not a racial characteristic," there being examples of namadicus overhangs in "quite a number of European and African aurochs skulls". These two authors (pg. 14) also question the separate origin of the zebu stating:

"The hereditary physiological adaptability of zebu cattle in tropical and subtropical environments must be attributed to their evolution in a warm climate. This adaptability need not necessarily be due to inheritance from a wild ancestor of their own, distinguished by similar genetic properties, although

> obviously in a wild species like the aurochs ranging over so huge an area in Asia, North Africa and Europe, the southern representatives would be genetically better adapted to a warm climate, and the northern to a cold one."

In sum, much of the recent debate concerning the origin of the zebu has revolved around whether it derived from a truly different **species** than did taurine cattle and the related question of whether Bos namadicus is better viewed as a separate species or as a subspecies of Bos primigenius. Zeuner, himself, was uncertain of the latter, allowing that: "It may well be ... that Bos namadicus is simply a geographical subspecies of Bos primigenius which developed during the Pleistocene" (Zeuner 1963a: 11-12). Clearly, if one argues that Bos namadicus is the ancestor of humped cattle, then it cannot have been a separate biospecies distinct from Bos primigenius since their descendents are completely interfertile. This is not to deny, however, that there may have been significant morphological differences between the European and the South Asian wild cattle just as there are clear differences between zebu and taurine cattle. In rejecting Grigson's arguments, Epstein and Mason (1984: 7) overlook the fact that the morphology of the supracristal portion of the occiput, while important to her, is only one of several characters that she notes as being distinctive in Bos namadicus and in agreement with differences between domestic taurine and zebu cattle (Grigson 1973: Chapter 5, alluded to in Grigson 1980 and summarized in Grigson 1985).

In view of these considerations, it is useful to continue to make distinctions between zebu and taurine cattle and between the wild cattle of South Asia and those of Europe. For purposes of continuing discussion the terms zebu and Bos indicus will be used interchangeably to refer to what might more properly be called Bos primigenius indicus. Likewise taurine cattle and Bos taurus refer to Bos primigenius taurus, aurochs or European wild cattle or Bos primigenius to Bos primigenius primigenius, and South Asian wild cattle or Bos namadicus to Bos primigenius namadicus. (For problems related to the nomenclature of domestic animals see Bohlken (1961), Groves (1971), Corbet (1978: 8) Clutton-Brock (1981: 194-197), and Corbet and Clutton-Brock (1984).)

Since the Yahya and R37 collections contain no large skull pieces and only smashed fragments of horncores, one difference between zebu and taurine cattle that is particularly useful is the morphology of the orbital rim of the zygomatic (jugal) bone (Figure 5.1A). Grigson (1980: 23) notes:

> In all the indicus skulls for which this character is recorded the orbital rim is flat (see Grigson, 1976, p. 123, figure 8). Flat orbital rims were found in the younger taurine cattle, but in almost all cases were replaced in the older age groups by a sharp rim. Thus the persistence of the flat rim in older animals could be used as a fairly good indicator for indicus skulls. In all the indicus skulls the lower border of the rim terminates on the

jugal plane in contrast to most of the taurine skulls in which it usually ends of the jugal-frontal suture.

Table 5.2 presents information on 12 orbital rim fragments (zygomatic bones) from Tepe Yahya that are reproduced in Plates VI and VII. (Refer also to Figure 5.1A.) These are the only specimens for which any part of the rim is preserved and all specimens, with the exception of 212-1, suffered significant damage during excavation and handling. For no specimen could age at death be ascertained although there are no obviously young specimens present. Only one specimen, 159-44, has a more or less parallel-sided rim, the others (where it could be ascertained) tapering somewhat nasally. Two specimens, 159-44 and 212-1, have lower rim borders that terminate on the jugal plane. The same may also have been true of specimen 2107-3. Specimen 1941-3, the earliest, has an exceptionally sharp nasal part of the rim but a completely flat and relatively wide middle portion. Furthermore, to judge by its medial-lateral breadth, it came from a large individual. The only specimen with a characteristically taurine pinched and sloping rim comes from phase IVC.2 and is the latest in this collection. All of the other rims are flat or slightly concave or convex. In sum, the zygomatics indicate the presence of zebu-like animals and of taurine-like animals and of animals with a combination of characteristics.

Another sometimes useful difference between taurine and zebu cattle is the presence of bifid (notched) dorsal spines of thoracic vertebrae in the zebu. For all of the large mammal thoracic vertebrae present in

this Yahya-R37 assemblage, however, there is only one dorsal end of a dorsal spine preserved intact. This specimen comes from Tepe Gaz Tavila-R37 (3562-22) and is notched (Plate VI). Again, the presence or absence of such a spine is not always a clear-cut diagnostic character. Epstein and Mason (1984: 13) note that the "majority of humped cattle are distinguished from humpless cattle by the bifid spinous processes of their thoracic vertebrae, but uncleft spinous processes have been observed in some pure zebu cattle." In addition, some taurine cattle occasionally also may have bifid spines (Stallibrass 1983: 265). Given the east Iranian location of the site and the presence of zebu-like orbital rims in only slightly later levels at Tepe Yahya, however, the R37 specimen can confidently be said to come from a humped animal.

Characteristic of modern zebu are both a hump and a dewlap, these being particularly exaggerated in large males (often by artificial selection). Both features are well-known from the engraved stamp seals of the Harappan civilization where the hump is usually sited on the back of the base of the neck (e.g., Mackay 1937: plate XCIX, no. c). Two types of hump are defined by Epstein and Mason (1984: 12, following Epstein 1971: 335-336 and others cited therein): thoracic (hump on shoulder above 1st-9th thoracic vertebrae) and cervico-thoracic (hump partly on posterior portion of neck above 6th-7th cervical to 4th/5th throracic). These authors go on to note that "(w)herever cervico-thoracic-humped cattle make their appearance in prehistoric and protohistorical times they precede thoracic-humped zebus chronologically" (Epstein and Mason 1984: 14), a statement that is based on iconographic evidence dating no earlier than the 4th millennium bc

(Epstein 1971: 505-535).

The earliest representation of a zebu that we now have, however, negates this developmental sequence. The hump on a bull figurine from Mehrgarh Period IIA (c. 5000 bc) is placed firmly in the thoracic region and not at all on the neck (Figure 5.1B). The same configuration is also found on another figurine from somewhat later levels at Mehrgarh (Period III, c. 4000 bc: Meadow 1984: fig. 6.2 b). Epstein and Mason (1984: 14) do note that cervico-thoracic humps occur "secondarily" in crossbreeds of thoracic-humped zebus and humpless cattle. With the Mehrgarh evidence now in front of us, it is tempting to suggest that this "secondary occurrence" was, in fact, the origin of the cervico-thoracic hump, the original crosses taking place before the late 4th fourth millennium bc perhaps on the Iranian plateau if not in western South Asia. That both the dewlap and particularly the cervico-thoracic hump came to be exaggerated in iconography might suggest that these traits were emphasized in the breeding of at least certain animals by the 4th millennium bc if not before. One direct source of information for the existence of such breeding programs would be provided if size were selected at the same time as soft tissue morphology. In such a case, we might expect the existence of remains from some quite large male animals alongside the more usual smaller sizes. The difficulty with this approach, however, lies in separating bones of large domestic stock from those of wild stock.

The size and build of the animals represented by their bones at Tepes Yahya and Gaz Tavila-R37 are reflected in the measurements listed in Appendix 2. Certain of these dimensions have been selected and

compared over time and between skeletal parts in Figures 5.2, 5.3, and 5.4 using the difference of logarithms technique discussed above (Sections 4.4.4.1. and 4.4.6.2.). The "standard animal" providing the zero-line dimensions for these figures is a large adult male zebu, the choice of which seems appropriate since, as shown above, the presence of Bos indicus is attested by the morphology of some orbital rims and by the presence of a bifid dorsal spine. This particular specimen was collected by Stanley J. Olsen at Ft. Meade, Florida, in 1957 and accessioned to the Mammal Department of the Museum of Comparative Zoology of Harvard University as specimen no. MCZ 51755 (Table 5.3). The animal was probably of the thoracic-humped "American Brahman" breed "that was developed from approximately 266 bulls and 22 females of several strains of Indian humped cattle imported to the United States between 1854 and 1926" (American Brahman Breeders Association, n.d.: 3). Since these modern "Brahmans" have been selected and bred for a specific configuration and characteristics (ibid.: 7-15) and, in fact, are not of 100 percent Bos indicus ancestry (Rhoad 1949: 116) and since there is evidence from the orbital rims for taurine-like as well as zebu-like animals at Tepe Yahya, it is legitimate to raise the question as to how well the relative sizes of the bones of the MCZ standard will match the relative sizes of the prehistoric Iranian specimens. For example, will the breadth of the astragalus relate to the length of the first phalanx in the same way in the prehistoric material as in the standard?

One way that this question of allometry can be addressed is to examine the extent to which the median values for the log differences of

the various prehistoric skeletal parts (listed in Table 5.4) fall in a line parallel to the zero-line (Figure 5.2) and how they relate to the range described by the medians defined for the various chronological divisions (Figure 5.3). For these purposes, lines have been drawn on Figure 5.2 to show the total range of variation of the medians for R37 through Yahya VA (-.027 to -.046) with a third line more to the left to show the location of the Yahya IVC median (at -.061). The medians for only 6 of the 24 skeletal parts (25 percent) fall outside of the maximum range depicted, 4 to the left (ulna, scapula, ulnar carpal, and central+IVth tarsal: 24 bones or 8 percent of the total of 295) and 2 to the right (phalanx 2 anterior and posterior: 46 bones or 16 percent of the total). An additional 4 medians fall to the right of the Yahya IVC median but to the left of the R37-Yahya VA median (femur, tibia, Os carpale II+III, and humerus: 36 bones or 12 percent of the total). Of the 8 left-oriented cases, 4 involve 5 specimens or fewer and can be seen as the result of chance. The other 4 cases involve 8 to 12 specimens, and these might reflect more significant relative differences between the prehistoric and modern animals. Of particular note is the case of the 46 second phalanges, the medians for which fall to the right of the described range. The prehistoric bones are relatively longer than those of the modern zebu which, in fact, appear (subjectively) rather "stubby" when compared with the second phalanges of other modern comparative cattle.

Because the individual bones belonging to the the overall relatively large and relatively small skeletal part categories are scattered throughout the collection, their biasing effects should tend

to cancel each other out. If, however, second phalanges, for example, had been found to dominate the assemblages of certain temporal units, and the medians for the log differences of those units had been to the right of (larger than) medians for units without many second phalanges, then one could question the significance of the difference in the location of the medians. (See Section 5.4. for discussion of an actual instance of problems of allometry in sheep.)

Allometric difference could also be reflected if there were consistent differences in the way length (proximo-distal) and breadth (medio-lateral) dimensions arrayed themselves relative to the standard. Such patterning is not present in this collection although there is a tendency evident in Figure 5.2 for relatively smaller dimensions to be more proximal in the animal and larger dimensions more distal. This tendency is observable in the medians and both sets of extreme values but does not appear to be consistent enough or to involve enough specimens to invalidate the procedure. In sum, for Yahya and R37 cattle, most of the median values fall within a remarkably narrow range between -.0275 (radial carpal) and -.0475 distal tibia), and while there do seem to be some allometric differences between the modern and ancient material, it should not seriously affect interpretation of median values.

Turning now to a consideration of possible changes through time, Figure 5.3 reveals that there is no consistent trend in the medians for R37 and Yahya VII through V. Those with the lowest values occur in VIIC, VIIB, and VC and those with the highest values in VIB and VB. As for extreme values, there are no very large specimens after Yahya VIA

(log difference greater than .050) and no very small ones before VII-VI (log differnce less than -.110). This might indicate a trend toward overall diminution except that there are so few specimens involved (3 at each extreme) that it is hardly convincing. With period IVC, however, the situation is rather different. It has the lowest median of any temporal division (at -.061), only a single element larger than the standard, and a considerable number of quite small specimens.

The differences in patterning between Yahya IVC and the earlier periods can be explained, at least in part, by reference to Figure 5.4 where curves are plotted to reflect the proportional distribution of log differences by .020-wide classes within temporal divisions. The curve for Yahya IVC as a whole (solid line) is distinctly bimodal with a considerable representation of smaller values. If one breaks the collection down into its phase 2 (earlier) and phase 1 (later) components, however, and plots the two curves separately (2: dashed line, 1: dotted line), it is clear that a majority of the smallest bones are from IVC.1. (See also Table 5.4.) Furthermore, the median for IVC.2 moves to -.042 which is in line with all of the other Yahya medians. The IVC.2 curve does, however, remain bimodal, and there are relatively fewer values in the +.010/-.010 and -.010/-.030 classes and more in the -.070/-.090 and -.090/-.110 classes than in the other Yahya curves. With only 16 specimens, however, one can only wonder how real these differences are just as one can only wonder about the significance of the shift to the left of the IVC.1 curve with only 10 values plotted.

Archaeologically the distinction between phases IVC.2 and IVC.1 is an important one, the former referring to the occupation of the monumental "Proto-Elamite" structure, the latter to what may have been a "squatter" settlement after the structure had largely fallen into ruin. (See Chapter 7 for further discussion.) The distinction between Yahya IVC and the earlier periods is also important because, not only was there a marked change in the nature of the architecture from domestic to monumental, but there appears to be a gap representing up to 500 years between the latest architectural remains of Yahya VA and those of IVC, at least on the south side of the mound (Table 1.1). If we can take the IVC curves of Figure 5.4 at face value, it appears that there was an introduction of smaller stock into the Yayha area in that 4th/early 3rd millennium bc gap. This possibility will be discussed below following consideration of the curves of the earlier periods.

First, however, it is necessary to discuss factors that might serve to limit the reliability of this collection of data, to color its very nature, and to affect its interpretation. The numbers of specimens involved in any given temporal division are small (2-51), and these by chance of preservation and excavation must serve to represent an unknown reality. Indeed, it is just because the collections of individual skeletal parts are so small for any given temporal division that it has been necessary to employ the difference of logarithms technique. Even so, because seven of the assemblages in Figure 5.3 have 15 or fewer specimens, it has been considered advisable for purposes of Figure 5.4 to disregard the material from R37 and Yahya VI-V, to combine VIIE and VIID with VIIC, and to form a composite period V curve. Furthermore,

while allometry may not have a significant overall effect on the location of a median, it will affect the shape of a curve like those in Figure 5.4 because the ranges for each sex will be at a somewhat different place with respect to the standard (zero-line) for each element. This phenomenon will tend to obscure modes particularly when there are numbers of dimensions where size differences associated with sex are not so clearly marked (i.e., where there are significant areas of overlap).

Another fact that must be considered is that not all articular ends were or could be measured. For example, for bones where state of fusion was observable, only fused specimens were measured except for 4 distal metapodials and 1 proximal femur, all from Yahya VIIB and VIIA and all except 1 with log differences greater than -.040 (specimen nos. 815-5, 822-8, 1935-23, 2305-8, and 2305-9 in Table 5.4 - all except the last probably from young male animals). For skeletal parts that grow only through bone apposition, all specimens except those from obviously very young animals were included, and thus considerable overlap can be expected between females and young males. Also, one might expect that the smallest measured specimens would represent young females. This does not always seem to be the case, however, because the smallest log difference values for many of the temporal divisions in Figure 5.4 represent the fused ends of long bones (see Table 5.4). To be sure, these probably do come from females but not necessarily from particularly young ones.

Also of importance for the interpretation of Figure 5.4 is the fact that there is only one unfused long bone (a proximal femur) in the total

Yahya IVC cattle collection, and thus the proportion of males to females should not be affected by the absence of unfused, not measured, specimens unless such pieces were destroyed during food preparation, disposal, or post-depositional forces. The same is also true for all of period V (the single unfused specimen being a second phalanx). In contrast, for periods VI and VII, up to 75 percent of particular skeletal elements can be unfused. If these came largely from male animals, then we can expect males to be underrepresented in curves for those temporal units. (See Section 5.5. for presentation of the fusion data.)

Turning now to the pre-Yahya IVC curves in Figure 5.4, they are all quite similar in shape in the sense that they are all basically (if not strictly) unimodal. The major modes swing between the 0.020-wide class centering on -.020 and that centering on -.060 suggesting that these might correspond to males and females, respectively, with a significant area of overlap between. A somewhat heavier representation of females would place the mode more to the left, of males more to the right, and of neither in the center. It is also possible that the swings in the modes have no significance, being due merely to the small sizes of the individual collections. In fact, most of the area under each curve could represent females, with only a very few males represented at all. This seems unlikely, however, particularly for Yahra IVC and V given what was noted above about proportions of unfused specimens.

Also characteristic of all pre-IVC distributions is the presence of a number of specimens larger than the standard. The three largest specimens are an anterior second phalanx in Yahya VIIC, an Os tarsale

II+III in VIB, and a distal metatarsal in VIA. Of these, the distal breadth dimension for the metatarsal is estimated and thus could perhaps be too large, and the tarsal appears somewhat pathological and is particularly deep (dorso-plantarly) in relation to its breadth (medio-laterally). The second phalanx is clearly from a big and heavy animal, but the fact that log differences for this skeletal part are somewhat larger, overall, than those from other skeletal parts was noted above. In spite of these qualifications, all three specimens could have come from wild cattle as might also have some of the other specimens with log differences larger than the standard. In the area of the zero-line, however, one can expect overlap between wild females and domestic males. This can be seen in Figure 5.4 by comparing any of the pre-Yahya IVC curves with the curve for Jarmo (eastern Iraq, 7th millennium bc) that has been formed in the same fashion as those for Yahya (from data in Stampfli 1983: tables 28, 32). Stampfli (1983: 441) states: "It is absolutely clear, as matters stand, that at Jarmo no remains of domestic cattle have been found. All bones are clearly within the size range of Bos primigenius. Some are at or near the lower limit for known wild cattle, but this does not mean that they can be regarded as representing domestic animals." The shape of the Jarmo curve is remarkably similar to those from pre-IVC Yahya, and its location, centered well to the right of the zero-line, serves to confirm the predominantly domestic-animal origin of the Yahya collection. Like some Yahya curves, the Jarmo curve has an outlier to the left, although in this case the single specimen is an ulnar carpal that could have come from a young animal.

In evaluating the Yahya material it is also useful to note the situation at the somewhat later site of Shahr-i Sokhta located in Iranian Seistan (3rd millennium bc; the earliest period at Shahr-i Sokhta is contemporary with Yahya IVC). Caloi and Compagnoni (1981) have published a preliminary analysis of the bovine remains from that site in which they postulate the presence of two forms of cattle. The larger form is defined principally on the basis of a number of large and distinctively-shaped horncores that show marked sexual dimorphism. These horncores "almost all ... have signs of cutting at the base and were detached carefully" (ibid.: 187), a feature that Caloi and Compagnoni argue is consistent with the possibility that they came from a local wild form of cattle and were a kind of hunter's trophy. In contrast are the smashed fragments of much smaller horncores, the basal diameters of which were measurable only on occasional frontal segments. These, the authors argue, belong to the domestic animals of the site that, to judge from figurines and bifid dorsal spines, were zebu. Also present at Shahr-i Sokhta were a "scanty number of large-size bones, particularly the immature specimens of a large size, which in this case could be young males" (ibid.: 187). Translating the ranges and means of their table 3 into log differences (here: Table 5.5) produces distributions remarkably close to those defined for the individual skeletal parts for Yahya (compare Figure 5.5 with 5.2). Even most of the Shahr-i Sokhta **means** fall within the the narrow range noted above for the Tepe Yahya **medians**, although this has significance only if the means closely approximate the medians as a measure of central tendency for the Shahr-i Sokhta material. It would seem, therefore, that, on an

overall basis, the bovine assemblages from the two sites are very similar as far as ranges and perhaps central tendencies of bone sizes are concerned. The Shahr-i Sokhta collection, however, apparently does not include specimens so large or so small as the Yahya outliers, and it is not possible to judge whether there is any size change through time.

Returning to Tepe Yahya, beginning in temporal division VII-VI there are outliers to the left of three of the curves in Figure 5.4, these lying in the -.110/-.130 or -.130/-.150 classes. The specimen in Yahya VII-VI is a fused distal humerus, that in VIA is a fused distal radius, and that in VA is an astragalus (distal breadth). The smallest specimen in IVC is a fused distal humerus. All of these bones, with the possible exception of the astragalus, can be said to have come from animals that had reached their adult size. The question to be considered is whether these specimens merely reflect the presence of extremely small females of a single domestic population or whether a second population of considerably smaller domestic animals is involved. If the latter, it would mean that their bones are represented much less frequently in the pre-IVC assemblages than are those of the main domestic group.

The source of animals for a second, smaller population, might be to the east or to the west of the Yahya area. To the east, the cattle of the Greater Indus Valley had reached a size level similar to that of Yahya IVC (beginning of the 3rd millennium bc) by the end of the 6th millennium bc (Mehrgarh IIA; Meadow 1984a: fig. 2; see, also, Meadow, in press). To the northeast at Shahr-i Sokhta, the 3rd millennium cattle apparently remained at a size similar to that from pre-3rd millennium

levels at Tepe Yahya, the overall mean log difference being -.036 which lies between the R37/Yahya VII-V medians of -.027 and -.046 and well above the Yahya IVC value of -.061 (but see qualifications above concerning the Shahr-i Sokhta values). To the west (but east of the Euphrates) there are few measured assemblages of cattle bones dating to the late 6th - early 3rd millennia bc, and those that exist include very few specimens or very few measurements. Perhaps the largest is that of Banahilk (eastern Iraq, Halaf period, early 5th millennium bc), for which measurements from 28 specimens (the total for which individual dimensions were reported by Laffer 1983: table 54) provide a log difference curve similar to that for contemporary Yahya VIIE-C both in shape and location of the median. Data from later sites to the west are scarce, making it difficult, for the present, to assess that direction as a possible source for smaller breeds of cattle. This is particularly unfortunate since the Proto-Elamite configuration of the archaeological assemblage of Yahya IVC suggests strong ties to the west. When measurements for bovine bones from contemporary Proto-Elamite levels at Tal-i Malyan (near Shiraz: Banesh phase) and Tepe Godin (near Kermanshah: Period V) become available, comparisons with those from Tepe Yahya should prove of great interest.

In sum, there could be up to four forms of cattle represented at Tepe Yahya. These would be the wild cattle of the area, one or two small breed(s) of domestic cattle, and domestic cattle of the mid-range. The wild cattle would be a Western Asian form of Bos primigenius, a form probably different from the namadicus form of South Asia. The small breed(s) could be Bos indicus of a size similar to that of

contemporary sites in South Asia and/or perhaps even a small form of _Bos taurus_ with western origins (for which, however, we have no evidence in the available literature). The cattle of the mid-range could be a cross between either of the small breeds and cattle of local wild ancestry, a cross that produced fairly large domestic offspring.

The evidence of the single bifid spine from Tepe Gaz Tavila-R37, noted above, suggests that some form of zebu was present in southeastern Iran at least by the beginning of the 5th millennium bc. The evidence of the orbital rims, reviewed above, suggests that animals with zebu-like characteristics were present through at least part of the sequence together with animals with flat mid-zygomatic areas that sometimes end nasally in a narrow or sharp ridge. These latter might represent the local wild phenotype or a zebu-taurine cross of some sort. In Yahya IVC.2 there occurs the only typically taurine orbital rim, this coming from a relatively small animal. It is tempting to suggest that this single example reflects the introduction of small taurine cattle from the west, but in the absence of substantiating evidence from sites in the west, this proposal must remain extremely hypothetical.

Finally there is the evidence of the figurines. The presence of representations of thoracic humped zebu at Mehrgarh was noted above, these serving to contradict the assertions of Epstein that cervico-thoracic humps were the first represented in iconography and therefore the first to occur on the living animals. At Yahya, the only bull figurine from the early periods comes from a IVC or late VA deposit on the north side of the site (locus XD.70.t2.3) and depicts a

cervico-thoracic humped animal (Beale 1986a: fig. 7.35). In addition, all of the bovine figurines from Shahr-i Sokhta published by Caloi and Compagnoni (1981: fig. 2) and by Tosi (1968: figs. 64-67; 1969: figs. 129-131, 133-140; 1983: fig. 15) have cervico-thoracic humps. Assuming that the figurines accurately depict hump placement of contemporary animals, these cervico-thoracic humped animals could represent the offspring of crosses between thoracic humped zebu of South Asian origin and descendants of local wild cattle or of domestic cattle brought from the west. This developement of a highland Iranian cervico-thoracic humped strain could have begun even before the 5th millennium bc although there is no figurine evidence for it until the 4th millennium. Selective breeding for size and morphology of the hump could also have begun early, a few prize animals being kept for draft or competition purposes. The dearth of bones from the upper size classes in Yahya IVC could reveal the demise of this practice in the Yahya area although it could also reflect the absence of bones from wild cattle in the collection.

5.3. Bovidae, Gazella sp. (gazelle)

Gazelle is the most frequently represented wild animal in the faunal collections from Tepe Yahya, south side, periods VII-IVC and from Tepe Gaz Tavila-R37. Even so, gazelle bones are rare at both sites, there being 95 specimens identified from Tepe Yahya and 11 from R37. This material, tabulated by skeletal part in Table 5.6, was identified to the genus level on the basis of comparison with modern gazelle, sheep, and

goat skeletons kept by the Museum of Comparative Zoology, Harvard University. Illustrations of some osteological differences between the caprines and gazelles have since been published by Stampfli (1983: figure 173). Tabulated in Table 5.7, are 212 specimens that could be identified only as small bovid (O/C/G = Ovis/Capra/Gazella = sheep/goat/gazelle). Other gazelle bones are almost certainly present among the fragments included in the medium mammal category (see Chapter 7).

As far as specific identifications are concerned, based on consideration of modern distributions (Corbet 1978: maps 100-101), the species of gazelle possibly present in the Yahya area are Gazella subgutturosa (Guldenstaedt, 1780) and Gazella bennetti (Sykes, 1831). The former is the goitered gazelle, living examples of which are readily distinguished from individuals of other gazelle species by a swelling around the larynx ("goiter") in both sexes, by horns in males that are lyrate in outline when viewed from the front and rather S-shaped in side view, and by an absence of horns in the females (e.g., Roberts 1977: 180-181). Unfortunately, only the last of these traits has potential for use when dealing with bone remains since neither the enlarged cartilaginous cylinder sheathing the larynx nor the distinctively shaped keratinous horncore sheaths are usually preserved in archaeological deposits. (A further complication, although not relevant to the goitered gazelles of southeastern Iran, is that females of the subspecies G.s. marica Thomas, 1897 of Arabia have well-developed horns (Groves 1969: 49).) In Iran, the goitered gazelle "occurs in the broader valleys and plains in and adjacent to the Zagros,

Alborz, and Khorassan mountains where there is perennial shrub vegetation dominated mainly by Artemisia" (Brian O'Regan, personal communication 2/2/82, based on his field studies of Iranian gazelles during the 1970s). Although there is shrubby vegetation, there is little Artemisia in the Shah Maran-Daulatabad or Soghun basins, plants of the genus being confined to higher elevations in these latitudes (see Meadow 1986).

The second gazelle species of the Yahya area has no goiter, males have more or less straight horns when viewed from the front, and females also have horns, these being round and spike-like (e.g., Roberts 1977: 180-183). This female spike is represented in bone remains by a pointed, nearly round in section, and relatively short core that contrasts to male cores that are much larger in both length and diameter and oval-shaped in cross-section. An approximately two-year-old male of this species was kept for a short period (before it died) at the Yahya project's expedition house in the early summer of 1969 (Plate VIII). It was reportedly captured in the Shah Maran-Daulatabad basin. On this basis it is possible to confirm the presence of Gazella bennetti in the Yahya area today.

The classification and nomenclature of non-goitered Iranian and South Asian gazelles has been a matter for considerable debate, these having been considered variously as a separate species (G. bennetti) and as one or more subspecies of G. gazella (Pallas, 1766) or G. dorcas (Linnaeus, 1758). (Compare Blanford (1888-91: 526), Ellerman and Morrison-Scott (1966: 392), Groves (1969), Lange (1972), Lay (1967: 226), Roberts (1977: 180-183), among others.) Based on

chromosome studies, it appears that classification as a separate species is correct (Hans-Peter Uerpmann, personal communciation of unpublished karyotype data, 3/8/86). For reasons of priority, this species must be called _Gazella bennetti_ (Sykes, 1831). Within such a wide and dissected range, however, a considerable number of subspecies can be expected. Brian O'Regan (personal communication, 2/2/82) notes two for Iran: the jeber (subspecies _fuscifrons_ Blanford, 1873) and the chinkara (nominate subspecies for _G. bennetti_). The former "occurs in the subdesert plains surrounding the central basin - the Dasht-i Kavir, Kavir-e Lut, and the Seistan basin - and in the lower valleys and plains of the Persian Gulf watershed from Bushire eastward. In the Mekran coast south of the Mekran Mountains it is replaced by ... the chinkara." On the basis of this distribution, the modern specimen from the Shah Maran-Daulatabad basin (Plate VIII) should be a jeber. O'Regan goes on to note that there "is very little overlap between the ranges of the jeber and the goitered." Thus _Gazella subgutturosa_ should not be expected in the Yahya area although it is not possible to exclude absolutely the possibilty of its presence.

In sum, if modern distributions can be projected back to the mid-Holocene, the prehistoric Yahya material should be _Gazella bennetti_ and more likely to be jeber (subspecies _fuscifrons_) than chinkara (nominate subspecies). These liklihoods are confirmed by consideration of the horncore and measurement data.

Dimensions of the Yahya horncores are listed in Table 5.8 and selected specimens are illustrated in Plates IX and X. Clear differences between the sexes are evident. The male horncores are

larger and longer than those of females and are elliptical in cross-section with a flattened lateral side. In contrast, female horncores are nearly round. Cores with rather round sections are characteristic of some younger males, but these can easily be distinguished from those of females by their greater diameter.

In the case of the Yahya horncores, there is no overlap in the dimensions between those of males and females (Table 5.8), and when grouped according to sex, neither group has coefficients of variation for diameters and circumferance that lie above 9.2. (A value of 10 is considered by Simpson, Roe, and Lewontin (1960: 91) to be an average upper limit for a homogeneous sample.) The most variable horncore dimension is, for males, the greatest (anterio-posterior) diameter and, for females, least (medio-lateral) diameter.

In Figure 5.6, greatest diameter is plotted against circumferance for the Yahya material as well as for horncores from Jarmo (eastern Iraq, 7th millennium bc: Stampfli 1983: table 28), Tepe Sarab (western highland Iran, end 7th and early 6th millennium bc: Bokonyi 1977: 65), and Mehrgarh (Pakistani Baluchistan, 7th-3rd millennia bc: Meadow, previously unpublished data: see Table 5.9). There are no female horncores from Jarmo and Sarab, and these sites fall well within the modern range of Gazella subgutturosa and apparently outside of that for any other species (Corbet 1978: maps 100-101, Groves 1969: figs. 1-3). From both Yahya and Mehgarh there are significant numbers of female horncores, and, on this basis alone, the presence of Gazella bennetti is attested.

Figure 5.6 reveals additional interesting features about the compared collections. The Yahya male horncores fall completely within the scatter outlined by the Mehrgarh material, albeit toward the upper end of that scatter. There is some overlap between the Mehrgarh, Sarab, and Jarmo dimensions, but no Yahya specimens fall within the area of the Jarmo scatter (strictly defined) although one does lie within the Sarab scatter. When medians are located, those of Mehrgarh and Yahya are almost the same for greatest diameter and circumferance. Those of Jarmo and Sarab are also almost the same and are greater than those of the other two sites (Figure 5.6). Overall, the male horncores from Jarmo tend to be a little larger than those from Sarab, those from Yahya a bit larger than those from Mehrgarh.

The size trend for males is even clearer in the case of females. There is no overlap at all in the scatters from Yahya and Mehrgarh, the female horncores from Yahya being considerably larger. This difference is consistent with that documented by Groves (1969: Table 5) showing that the horns of modern female South Asian gazelles (subspecies G.b. christii Blyth, 1842 and bennetti and the Salt Range population) average about 30 percent shorter than those of the fuscifrons subspecies. Even though this proportion refers to horn and not to horncore length, it is of a magnitude similar to the average difference between the basal dimensions of the cores from Mehrgarh and from Yahya and thus may reflect a similar subspecific difference in the past. On this basis, the Yahya female gazelle horncores are identified as coming from the subspecies G.b. fuscifrons (the jeber), an identification that fits with the modern distribution patterns noted by

Brian O'Regan (quoted above).

Turning to the post-cranial elements, selected dimensions of Yahya gazelle bones (Table 5.10) are compared to those from Sarab and Mehrgarh in Figures 5.7 and 5.8 using the difference of logarithms technique described above (Sections 4.4.4.1, 4.4.6.2, 5.2.). The "standard animal" in this case (Table 5.11) is provided by the dimensions of a male gazelle collected near Zahedan, eastern Iran (United States National Museum 329358). On the basis of its provenience alone, this specimen is likely to be a jeber (G.b. fuscifrons). Two other specimens from eastern Iran also in the collections of the National Museum of Natural History (male: 328577 and female: 328578) come from the Makran coast near Chah Bahar and again, on the basis of distribution, are probably chinkara (G.b. bennetti), an identification supported by the basal horncore dimensions of the female (left core: 13.5 x 12.7, right core: 13.1 x 14.0) that are more like those of Mehrgarh than of the Yahya. (All three specimens are identified in the collections of the National Museum of Natural History, Smithsonian Institution, Washington, DC, as Gazella dorcas bennettii (sic). Subspecific identification can be checked if the skins are still available, chinkara having a redder coat (Brian O'Regan, personal communication 2/2/82).)

Figure 5.7 displays ranges and medians for Mehrgarh and Sarab and individual values for Yahya and R37 by skeletal part (data in Table 5.12). These values are plotted all together by site in Figure 5.8 where the range of the medians for Mehrgarh and Sarab and the single median for Yahya/R37 are also noted. There is considerable variation in

the location of the medians for Sarab and Mehrgarh, a phenomenon likely due, at least in part, to differences in the relative dimensions of the bones from those sites when compared to the standard (allometric variation: see Figure 5.7). On the whole, however, the Sarab values tend to be larger than those from Mehrgarh or Yahya/R37. This latter is true both when extreme values are considered and when the location of medians for each skeletal part are noted. In Figure 5.8, the Yahya/R37 median lies toward the smaller end of the range of medians for Sarab and toward the middle of the range for Mehrgarh. The overall range for Yahya/R37 lies wholly within the range for Mehgarh although that latter site has somewhat smaller specimens as well. There are two Sarab values smaller than the smallest Yahya value, but not Yahya value is as large as the larges Sarab values.

Taken as a whole, the slight average differences in size of the gazelle postcranial remains support what was shown by the horncores, namely that a closer relationship exists between the Yahya/R37 and Mehrgarh material than between either and the Sarab material. In other words, the Yahya/R37 gazelles are <u>G. bennetti</u> and not <u>G. subgutturosa</u>, although in the absence of positive diagnostic characters for the long bones and for the male horncores, identification of these must remain on the level of probability. Finally, it is interesting that most of the specimens from Yahya/R37 are larger than the standard even though the standard is a male gazelle. Possible explanations are that the standard is a particularly small male or that the modern gazelles of southeastern Iran are smaller than their ancestors in that region. The dimensions of the standard are considerably larger than

those for the the male G.b.bennetti from Chah Bahar listed in Table 5.11. Thus, it seems likely that there has been some size diminution since the mid-Holocene in the gazelles of the region. This hypothesis warrants testing using gazelle bones from later periods.

Turning now to the "demographics" of the Yahya/R37 gazelle, collection, sex and approximate age at death can be determined for some of the specimens (Tables 5.8, 5.10, 5.13). Of the 14 horncores in the collections, half are from males, half from females (Table 5.8). To judge from the gracility of the margin of the birth cavity in the area of the acetabulum, 2 gazelle and 1 O/C/G pelvic fragments come from females, none from males (see discussion by Lemppenau (1964) on using the pelvis to sex various species of ruminants). In sum, females appear to be at least as well represented as males according to the horncore and pelvis data.

Data on epiphyseal union reveal only 2 of 30 gazelle limb bone epiphyses not fully fused to corresponding diaphyses; the analagous figure for O/C/G material is 4 of 9 (Table 5.13). The difficulty of identifying to genus the bones from young animals is reflected in these ratios. Finally, of 7 gazelle maxillary, mandibular, and loose tooth fragments, 3 are from animals with all permanent molars fully in wear, 2 are from animals with the third molar in an early stage of wear, and 2 are from younger animals (Table 5.10).

The best information available on age of limb bone fusion in relation to tooth eruption and wear for modern Middle Eastern gazelles comes from the work of Simon Davis (1980) on Gazella gazella and Gazella dorcas in Israel. Davis found that all limb bones are fused by

18 months, the same age by which dentine is exposed on the second cusp of the lower third molar and by which the last deciduous molar is either heavily worn or replaced. Assuming that this information has some validity for the Yahya/R37 gazelles, 5 of the 7 jaw specimens came from animals 18 months of age or older, 1 from an animal older than 6 but younger than 20 months, and 1 from a young animal of 5-8 months. Translated into survivorship proportions, 83 percent (5/6) are from animals definitely older than 8 months and 71 percent (5/7) from animals older than 18 months.

For the post-cranial skeleton, 100 percent of the gazelle bones are fused up through the 8-10 month range, 80 percent in the 10-16 month range, and 83 percent in the 12-18 month range. Analagous figures for the combined gazelle and O/C/G collections are 92, 80, and 70 percent. The only proportions that can be compared directly between the cranial and post-cranial material are those for the category of definitely greater than 8 months. As noted, the percentage for teeth and jaws is 83 while that for gazelle post-cranial is 92 percent (11/12) and that for combined post-cranial is only 68 percent (13/19). A value between the two post-cranial figures would be similar to that for the cranial material. Of course, these proportions are for an undivided Yahya/R37 assemblage and, as such, have only limited value. Nevertheless, they do indicate that bones from young gazelles are considerably less common than are those from young sheep and goats (Section 5.5.3.3).

5.4. Bovidae, *Ovis* sp. (sheep) and *Capra* sp. (goat)

Ovis and *Capra* together with eight other Palearctic genera (or nine if *Ammotragus* is considered a separate genus) make up the subfamily Caprinae of the family Bovidae (Corbet 1978: 211-219). *Ovis* and *Capra*, however, are the only genera that occur in a wild state in the Middle East (excluding North Africa) as well as the only genera to have had members domesticated. Their bones and teeth are often difficult to identify as "sheep" or "goat", particularly if fragmented, and thus many specimens can be identified only as *Ovis*/*Capra* (sheep/goat or "O/C" for short). In addition, it is convenient to use the term "caprine" to refer to the three groups of specimens together (*Ovis*, *Capra*, and O/C) even though, strictly speaking, "caprine" can refer to all or any of the ten or eleven genera of the subfamily.

Taken together, sheep and goats are the most frequently represented taxa in the faunal collections from Tepe Yahya, south side, periods VII-IVC and from Tepe Gaz Tavila-R37. The total number of caprine specimens is 7143 with 1069 from R37 and the remainder from Yahya. This material is tabulated by skeletal element and temporal division in Tables 5.14 (sheep), 5.15 (goat), and 5.16 (O/C) and summarized in Table 5.17. In evaluating the skeletal part distributions it is essential to bear in mind that most of the material identified as "medium mammal" (discussed in Chapters 7 and 8) probably also comes from sheep or goats. Of particular note is the fact that ribs and vertebrae were often identified only as medium mammal and thus are conspicuously

under-represented in Tables 5.14-5.17.

Characters used to identify the bones of Ovis and Capra have been compiled and discussed most notably by Boessneck, Muller, and Teichert (1964), summarized by Boessneck (1969), and evaluated by Lawrence (1980: 287-299). Additional work by Kratochvil (1969) has provided diagnostic characters for the distal tibiae of the two genera, while attempts by Payne (1985) to find characters for the teeth seem promising. Payne's work, however, was not available at the time of the analysis of the Yahya/R37 collections.

To the extent that the osteological differences between sheep and goats described in the literature have not been tested on all species of each genus, they are not, strictly speaking, generic differences but differences useful to identify specimens of certain populations of Ovis and Capra. For this reason, as is commonly recognized by specialists, they cannot all successfully be employed on all collections. Nevertheless, when evaluated and modified in a regional context, they are important. For the most part, variation and overlap between the two genera limit the usefulness of single characters for purposes of identification, and multiple characters, evaluated for regional differences, have to be employed.

A good example of the varying value of a character is the shape of the distal portion of the medial epicondyle of the humerus which was found to be diagnostic on the collection of Central European material evaluated by Boessneck, Muller, and Teichert (1964: 65). On Yahya and R37 humeri, however, the squared-off morphology defined for sheep is rarely fully expressed, the shape of the margin being more diagonal and

goat-like in many cases even where other characters proclaim the bone to be from a sheep. Likewise the shape of the inner surface of the epicondyle described by Lawrence (1980: 289) as diagnostic for the Cayonu material was not found to be useful for the Yahya/R37 collections.

A listing of diagnostic characters used by this investigator to discriminate sheep and goat can be found in Table 5.18. Except in the cases of the skull for which single characters were often sufficient and of the horncores that are discussed below, the characters are listed in the order of their importance for distinguishing Ovis and Capra specimens in the Yahya and R37 assemblages. For more detailed descriptions, the reader is referred, in that table, to figures and discussion in the relevant literature.

From Table 5.17 it is evident that the percentage of caprine bone identified to genus (sheep or goat) varies widely from skeletal part to skeletal part (0.0 - 88.4 percent) as does also the percentage of sheep (8.9 - 63.6 percent of the total identified to genus). (Percentages are not listed in Table 5.17 if the number of specimens is fewer than 6.) Fragments most frequently including enough diagnostic characters to make identification possible are the horncores, occipital area of the skull, distal scapula, distal humerus, proximal ulna, proximal and distal radius, distal metacarpal, acetabulum area of the pelvis, proximal femur, proximal and distal tibia, astragalus, calcaneum, distal metatarsal, and the phalanges. Percentages for these are graphed in Figure 5.9 together with percentages for atlas and axis, proximal humerus, proximal metacarpal, distal femur, and proximal metatarsal.

None of these last named skeletal parts could be identified to genus in more than 30 percent of the cases principally because diagnostic areas were not present on the specimens.

Overall for the skeletal parts graphed in Figure 5.9, 54 percent of the specimens from the Yahya/R37 collection were identified to genus and, of those, 29 percent were identified as sheep. Those skeletal parts that were distinguished most frequently are the horncores, distal metacarpal, astragalus, distal metatarsal, and second phalanx. Of these, the metapodials and phalanx are relatively rare in the collection as a whole and the astragalus and horncores relatively abundant (Figure 5.9: pair of lines at the base that graph actual versus expected distribution of skeletal parts). The best represented skeletal parts are the horncores, distal scapula, distal humerus, proximal radius, acetabulum area of the pelvis, proximal femur, distal tibia, and astragalus. Of these, all except the horncore, proximal femur, and astragalus have higher than average sheep ratios, and all except the acetabulum and proximal femur were distinguished a higher than average number of times. Thus, if anything, the proportion of sheep should be somewhat overestimated in assemblages dominated by these skeletal parts.

In contrast, the least well represented parts are the proximal humerus, distal metacarpal, proximal tibia, distal metatarsal, and the phalanges, all of which, except for the proximal tibia, also have higher than average proportions of sheep. Particularly low proportions of sheep were identified from horncores, atlas and axis, proximal metacarpals, and distal femurs (none). Of these all except the

horncores could rarely be identified to genus in any case. The horncores present special problems that are considered in the immediately following paragraphs. Discussion of possible reasons for the observed skeletal part distributions is deferred to Chapter 8.

Characteristics of goat horncores have been outlined notably by Zeuner (1955) and Bokonyi (1973: 69-71) and of both sheep and goat horncores by Boessneck, Muller, and Teichert (1964: 21-23), Flannery (1969: 270-278), and Stampfli (1983: 442-445). Stampfli, in particular, emphasizes the difficulties of distinguishing between the two genera on the basis of fragmentary material. Most of the Yahya and R37 specimens are fragmentary, there being 29 out of 141 specimens with complete cross-sections somewhere on the core but there are only 9 complete at the base.

Attribute states for those features that could be reliably tabulated are listed for each horncore in Table 5.19. These include: part of the core present (frontal, base, corpus, tip); whether the body of the core is solid or hollow; whether or not there are signs of a twist; the distinctness of the longitudinal channeling on the surface of the core (distinct, moderate, indistinct); the sex of the animal from which the core came; the estimated age of the animal based on considerations of core size and condition (infant, young, juvenile, subadult, adult); the completeness of the core section (complete, incomplete); a subjective assessment of wall density (compact, intermediate, porous); identification; other identifying characters including orientation of the core in relation to the midline, the orientation of any preserved sutures, the nature of the section, the

presence or absence of a dimple (see below); and relevant notes.

The characters of hollowness, twist, channeling, and density of surface were used in combination to identify the Yahya/R37 collection. Although Duerst (1926: 64) and Hatting (1975) have noted the influence of environmental factors particularly on the sinus structure of the cores, it appears to remain true that both male and female goats have a single large sinus that runs two-fifths or more of the length of the core from its base. When this feature was combined with the presence of a twist in the core (in domestic animals), relatively thin but dense core walls, or a longitudinally channeled or striated core surface, identification as goat could be made with some assurance particularly if sex was indicated by the projected original diameter of the specimen. As for sheep, a porous surface with few striations, relatively thick but porous core walls, the absence of helical twisting, the presence of a relatively tight curve in side view or of a lateral curve in axial view, and a poorly developed central sinus were used as criterea. Identifications could occasionally be checked (and were confirmed and never negated) in those instances where core shape and orientation of the core in relation to the median plane (Stampfli 1983: fig. 179) could be noted.

In addition, a character noted by this investigator for the skull could sometimes be used to advantage. In goats, on the dorso-nuchal side of the frontal, between the base of the horncore and the zygomatic process of the frontal, and parallel to and <u>near</u> the nuchal margin of the post-orbital openning, there is a shallow but marked elongated depression (dimple) in both male and female animals (Plate XI:d). Such

a dimple often does not occur in sheep (Plate XI:c), but if it does it is located on the nuchal margin and more laterally than in goats and tends to be narrower.

As compiled in Table 5.17, horncores were identified to genus in 71.6 percent of the cases but only 8.9 percent of those identified were determined to come from sheep and no cores were identified as coming from female animals. This latter fact may stem from a condition of hornlessness in female domestic sheep although the possibility could not be confirmed because all identified frontal fragments with the relevant area preserved appear to have come from males or from goats. There is one horncore, however, that conceivably could have come from a female sheep. This specimen from period IVC, the first listed in Table 5.19 (3728-7) and illustrated in Plate XI (b) together with a female goat horncore (a), unlike any other female horncore in this collection has a distinct curve away from vertical when viewed in profile with one or the other narrow margin of the core held toward the viewer. The specimen is partly hollow, moderately channeled, and has compact walls, however, all of which can be characteristic of goats. Its basal dimensions of 25.0 x 14.0 mm place it at the very margins of the scatters plotted by Stampfli (1983) for female sheep (fig. 182) and for female goats (fig. 181) from Jarmo (eastern Iraq, 7th millennium bc) and Anau (Turkmenia, various pre- and proto-historic periods).

Turning to evidence for domestic status, there is no unequivocal morphological evidence for wild goats among the male horncores. Two small fragments from Tepe Gaz Tavila/R37 (3561-33 and 3563-3) come from what were very large, sharply keeled cores of sub-adult or adult male

goats. Even on the small portion preserved, however, a bit of a twist can be seen, a feature that would seem to indicate domestication. The same is true of a fragment of a large goat core from Yahya VIB/VIIA (1933-33). Clear twisting is also evident on a number of smaller Yahya and R37 cores, many of which, to judge from their relatively friable surfaces and short lengths, come from young animals. At least some of these, based on consideration of the reconstructed cross-sectional area, must have been from males. In fact, twisting is evident less often among female than male goat horncores (Table 5.19). As far as measurements of male goat horncores are concerned, there are no specimens even with complete bases preserved.

In contrast, there are a number of measurable specimens from adult female goats. Of particular note is the almost complete horncore from Yahya VA (1316-7) that is remarkably similar to the core of a modern female wild goat illustrated by Bokonyi (1977: fig. 1) except that the Yahya core is a little bit more curved in side view. Bokonyi (1973: 70-71) has noted that the horncores of modern female wild goats are shorter and smaller than those of female domestic goats. Plotting the base-of-core dimensions for the Yahya specimen (greatest diameter: 25.0 mm by least diameter: 15.0 mm) on Bokonyi's figure 3 (figure 2 in Bokonyi 1977) places it within the recent female Capra aegagrus Erxleben, 1777 (wild goat) scatter. The other three measurable female goat horncores from Yahya (bases only) are somewhat larger and thus more likely to be from domestic animals. Their dimensions (197-6: 30.2 x 19.4 mm; 1942-43: 28.0 x 17.3 mm; 2112-29: 28.3 x 16.0 mm) fall within the range plotted by Bokonyi for Tepe Sarab (western Iran, late

7th-early 6th millennia bc). They also fall at the lower end of the range plotted by Stampfli (1983: fig. 181) for Jarmo. (Note that Stampfli delimits a "wild" area at the upper (larger) end of his scatter for females; this appears to be in error considering what Bokonyi has noted and also given the location of the single modern wild specimen plotted by Stampfli as the smallest specimen in his scatter!) The presence of evidence for twisting in some horncores identified as from female goats has already been noted. Thus domestic females as well as males are attested by the horncores.

As far as sheep as concerned, the only complete base of a horncore (male: Yahya period VIB: 1932-19) approximates in cross section (Plate X:c) the modern specimen from a wild male *Ovis orientalis* Gmelin, 1774 illustrated by Stampfli (1983: fig 177, Field Museum 97983). Its broadly rounded anterior portion and keeled posterior portion clearly indicate a wild phenotype. The basal dimensions of the Yahya core (greatest diameter: 59.0 mm by least diameter: 47.0 mm) are somewhat larger than those of the modern Field Museum specimen (56.0 x 41.0: Stampfli 1983: table 36). In contrast, a skull portion from Yahya IVC (3761-39) has part of the base of a much smaller horncore preserved (least diameter at base approximately 30 mm). The posterior margin of the core is less keeled than it is rounded (Plate XI:c), this being an indication of domestic status (Flannery 1969: 279). The rather heavy build of the skull confirms that it comes from a male. Other sheep horncore specimens from Yahya and R37 are only small fragments, all probably from males. Unless they have been included in the O/C category, there is only one specimen that could be from a female sheep.

In sum, the horncores provide direct evidence for domestic and wild female goats, domestic male goats, and domestic and wild male sheep. Female sheep are not directly attested, with the possible exception of one specimen. Measurements of the post-cranial bones confirm the presence of the remains of wild sheep in the Yahya and R37 collections and wild goats at least in the Yahya collections.

The size and build of the sheep and goats represented by their bones from Tepe Yahya, south side, periods VII through IVC and Tepe Gaz Tavila-R37 are reflected in the individual measurements presented in Appendix 2. As with the other artiodactyls, certain dimensions have been selected for comparison over time in a series of figures (5.10-5.16) using the difference of logarithms technique explicated above (Sections 4.4.4.1. and 4.4.6.2.). The "standard animals" providing the zero-line dimensions for these figures are the specimens used by Uerpmann (1979: 175) in his study of size change of sheep and goats in the Middle East during the Neolithic period. The sheep is a modern wild female <u>Ovis orientalis</u> from western Iran kept by the Field Museum of Natural History in Chicago (FM 57951). The "standard goat" is, in fact, an average of the dimensions of two <u>Capra aegagrus</u> specimens, one male and the other female, housed in the British Musuem (Natural History) in London (653 M and 653 L 2) and collected in the Taurus Mountains of southern Anatolia. Uerpmann used an average for goats because he felt that sexual dimorphism was more marked in that genus than in sheep.

Although these animals come from parts of the Middle East distant from southeastern Iran, their use as standards is established in the

literature and has been employed to advantage for material from even more distant sites (Meadow 1981, 1984a, in press). Uerpmann (1979: diagramms 2 and 3) has shown that, for periods earlier than the "early Neolithic," median arrows fall well to the right of (are larger than) his standard sheep and goat as do most of the bone dimensions. During the early Neolithic (as represented by the 7th millennium bc sites of Cayonu, Asikli Huyuk, and Can Hasan III in Anatolia, Bouqras in northern Syria, and Ganj Dareh in western Iran), the median arrows move to the left of (become smaller than) the standards, with most of the distribution falling to the left of the standards by the time of the "ceramic Neolithic."

Although potentially of concern, there is little danger that Uerpmann's measurements were taken differently than those taken by this investigator because the measurement definitions are unambiguous and the dimensions compared are measured in a straightforward manner (following von den Driesch 1976). The standard dimensions are presented in Table 5.20, and the log differences for goats and sheep are listed individually in Table 5.21 and 5.22, respectively.

Considerations of allometry and other limitations of archaeological assemblages that were discussed for cattle also apply to sheep and goats and, in large part, will not be repeated here (see Section 5.2.). The same tests for allometry that were applied in that case are employed here as well. The more straightforward situation for goats will be presented first and that for sheep subsequently.

Figure 5.10 displays the distribution of log differences for goats by skeletal part with all temporal divisions considered together. There

is not a great deal of variation in the median values, these ranging between -.068 (tibia) and -.096 (metatarsal). This range is only slightly wider than that for the medians of the log difference distributions when plotted by temporal unit as in Figure 5.11 (-.070 to -.093). In the cases of the metacarpal, metatarsal, and calcaneum, there are few large specimens in the measured assemblage. For the distal metapodials especially, it may be that the more massively built specimens were used as raw material for bone tools, this causing them to be kept back when the remains of meals were discarded. Such an hypothesis receives support from the relative under-representation of diatal metapodials in the caprine collection as a whole (noted above and Figure 5.9). There are, however, few such bone tools in the artifactual assemblage, a fact that may only mean that they were discarded in areas other than those excavated. Another possibility is that since the distal metapodials and calcaneum are relatively late fusing elements, the dimensions of the larger young males (with unfused and thus usually unmeasured bones) would not be represented in the measured collection. This seems a particularly good explanation for the calcaneum since this element is not under-represented in the collection as a whole (Figure 5.9).

As for size diminution through time in goats, there is no evidence in Figure 5.11 for this phenomenon. In fact, the lowest (smallest) median occurs in the earliest assemblage (R37), and all medians fall between -.070 and -.093, far to the left of the zero-line. The largest median (-.070) lies at approximately the same point as that displayed by Uerpmann (1979: diagramm 3) for ceramic Neolithic (6th millennium bc)

goats from Sarab, Hajji Firuz, and Belt Cave (northwestern Iran) and for Bronze Age goats from Jericho. Thus, on the whole, the Yahya/R37 goats were somewhat smaller than those at more or less contemporary sites in the western Zagros and Palestine. In contrast, they were about the same size as the animals from the ceramic Neolithic and later periods to the east at Mehrgarh in Pakistani Baluchistan where earlier, during the _a_ceramic Neolithic, the goats were larger, the size distribution revealed by the log differences being more like that of Uerpmann's "proto-Neolithic" (pre-"early Neolithic") group (Meadow 1984a: fig. 4 compared with Uerpmann 1979: diagramm 3).

Throughout most of the sequence from period VII through IVC at Tepe Yahya, but not at Tepe Gaz Tavila-R37, there are also bones from quite large goats present. The log differences for these specimens fall to the right of the zero-line in Figures 5.11-5.12 and represent all skeletal parts except the metacarpal, metatarsal, and calcaneum (see discussion above). Some of these bones could be from extremely large domestic males, but the presence of the remains of wild goats also seems likely. In fact, it is in the area from 0 to -.050 where one would expect the principal overlap to be between dimensions from wild females and domestic males if Uerpmann's choice of animals for the standard can reasonably be used to represent the size of the wild goats of southeastern Iran during the mid-Holocene. If anything, the wild goats of semi-arid and relatively hot Yahya area should be somewhat smaller than those of more temperate northern regions, although one must also consider the possibility of post-Pleistocene size diminution in wild goats of all parts of the Near and Middle East (e.g., Davis (1981:

107-108) for the Levant). Thus, if the modern Taurus Mountains goats are smaller than those of the mid-Holocene for that area, they might be about the size attained by mid-Holocene wild goats in southeastern Iran.

From a zoogeographic point of view, the presence of wild goat bones in the Yahya and R37 collections is not surprising. The hills to the north of the Shah Maran-Daulatabad and Soghun basins is, even today, the home for Capra aegagrus (personal communications from members of pastoral nomadic groups and of Iran's Department of the Environment confirmed by the general observations of Lay (1967: 227) that "wild goats seem to inhabit every mountain range in Persia"). In the past, before the advent of firearms, these animals may have come somewhat lower than they do today. Even so, one would expect Tepe Yahya, situated at a higher elevation, to be closer to wild goat habitat than Tepe Gaz Tavila-R37. Perhaps this can help account for the apparent absence of large specimens from the latter site.

Figure 5.12 presents the data of Figure 5.11 graphed to reflect the proportional distribution of log differences by .020-wide classes. Each curve has a single major mode generally located at or to the left of the median arrow. Assuming the presence of significant sexual dimorphism in size, this modal area can be interpreted as representing principally female animals, although natural allometric variation and the presence of dimensions from early fusing bones and elements that grow only through apposition will also cause young males to be represented in this area just as young females will be represented even farther to the left in the curves. There are minor modes present in many of the curves as

well, but the significance of these are hard to evaluate particularly for those curves compiled from samples of fewer than 30 specimens since peaks are more likely to be an artifact of chance clusterings. Furthermore, minor modes in the -.020 to -.040 range fall in the expected area of overlap between domestic males and wild females and thus may merely reflect that phenomenon. In any event, bones from larger domestic males would seem to be relatively rare in the collection, a circumstance that agrees well with expected slaughter patterns for a meat/milk oriented husbandry (see Section 5.5.).

In sum, both wild goats (Capra aegagrus) and domestic goats (Capra hircus Linnaeus 1758) are attested in the remains from Tepe Yahya, south side, periods VII-IVC although their presence is not so certain for Tepe Gaz Tavila/R37. Bones from domestic goats dominate the Capra assemblages, and there appears to be no change in size of the animals represented for the whole of the analyzed sequence. Domestic goats are attested by the mid-eighth millennium bc in western Iran and other parts of the Middle East (for summaries see Uerpmann 1979 and Gebel 1984). The only question about their presence in southeastern Iran by the end of the sixth millennium is the source and nature of the domestic population of that area. As noted above, the goats from Yahya and R37 appear somewhat smaller overall, than those documented by Uerpmann (1979: diagramm 3) for the ceramic Neolithic of western Iran and the Bronze Age of Jericho (medians calculated to be at c. -.065 and -.068). Instead they are more similar in size to those documented by Meadow (1984: figure 4) for 6th-3rd millennium deposits at Mehrgarh in Pakistani Baluchistan (medians at c.-.082 to -.085). Although

additional data needs to be compiled before these differences and similarities can be properly evaluated, different environments, different husbandry practices, different gene pools, and different origins for the goats can all be proposed as possible explanations.

The situation for sheep is less clear than that for goats for reasons of sample size and allometry. Compared to 435 goat dimensions there are only 186 sheep dimensions to spread over the same number of skeletal parts and temporal divisions. Furthermore, the size distributions of two elements (scapula and humerus) are significantly different than those for the rest of the collection, and the measured assemblages of some temporal units are heavily dominated by these skeletal parts.

Figure 5.14 displays the log differences for sheep by temporal division. Taken at face value, it reveals an overall, although uneven, trend toward smaller animals through time from a median at +.002 for R37 to a median at -.060 for Yahya V-IVC with an increase in IVC.2 to -.040. Excluding temporal units of fewer than 15 specimens, however, provides a much tighter range for the medians: from -.026 to -.055 with those medians that are located more to the right (larger) occurring in those assemblages with greater numbers of specimens larger than the standard. This narrower range is in keeping with those defined for goats and cattle.

Examination of Figure 5.13 where log differences are displayed by skeletal part reveals an interesting pattern. The medians for the scapula and humerus are far to the right of those for any other skeletal part as are also the right-hand, and in most cases, the left-hand

extremes. In addition, whereas 29 percent (54/186) of the log differences plotted on Figure 5.13 represent the scapula and humerus, 68 percent (25/37) of the points on or to the right of the zero-line are of these two elements. We have here either a problem of allometry or a problem of differential representation. If the latter is accepted as the explanation, then it must be admitted that bones from large (?wild) animals dominate only the scapula and humerus collections and do so throughout the whole sequence of temporal units. Such a situation seems unlikely, particularly given that the breadths of the ranges covered by the log differences for the humerus and scapula are similar to those covered by the radius (excepting two very small radius specimens) and the talus, these being the other two well-represented skeletal parts. Furthermore, the breadths of the ranges for scapula and humerus are only somewhat more restricted than those for the the same elements of the more highly sexually dimorphic goat (Figure 5.10).

A more likely explanation is that the standard has relatively reduced dimensions for the scapula and humerus. Why this might be is unclear, although the fact that the standard is provided by a single female animal may have something to do with it. One would expect that the weight of heavily horned heads in adult males would be reflected in heavily built front quarters. Thus, one would also expect dimensions, particularly for the scapula, to be greater and to increase more with age in male sheep than in female sheep. This hypothesis remains to be tested, however.

No matter what the cause, it is evident from Figure 5.14 and Table 5.22 that the effects of the allometry are marked, particularly on the

smaller assemblages of the Tepe Yahya and R37 collections. For example, 6 of the 12 log differences for R37 represent scapulae and all of these lie on or to the right of the standard. Thus the apparent size decrease between R37 and Yahya VII is merely the reflection of a heavy concentration in a single temporal division of a single skeletal part the size of which (for the dimension measured) is relatively larger in relation to the standard than are the dimensions of other skeletal parts.

Removal from Figure 5.14 of all points representing scapula or humerus dimensions produces the distributions of Figure 5.15. Here the range of medians is from -.023 (Yahya VII-VI) to -.071 (Yahya IVC.1). If temporal units with fewer than 15 specimens are excluded, the range is even tighter, running from -.034 (Yahya VI) to -.048 (Yahya V). Including all units, there still seems to be a general shift to the left in the locations of the medians and of the extremes, although this apparent pattern of size diminution is hardly a clear-cut one. Of interest is the fact that, as with cattle, the distribution for IVC.1 is farthest to the left suggesting the presence of generally smaller animals. Given the few specimens involved, however, not too much significance can be attributed to this phenomenon which is even more clearly depicted in Figure 5.16.

Figure 5.16 presents a portion of the data of Figures 5.14 and 5.15 graphed to reflect the proportional distribution of log differences by .020-wide classes. To provide large enough bodies of data to present in this fashion, it was necessary to eliminate or combine temporal units with fewer than 15 log differences (although the curve for the 12 IVC.1

specimens excluding scapula and humerus is plotted). Particularly unfortunate is the fact that this has led to the elimination of the R37 assemblage. Since the standard for sheep is provided by the dimensions of a female animal and not the average of a male and female (as in goats), one would expect distributions dominated by bones from females to have medians and modes that lie somewhat closer to the zero-line than in the case for goats. A comparison of Figures 5.12 and 5.16 shows that this expectation is met. Furthermore, the area of distribution for male domestic animals should strattle the zero-line in sheep, larger domestic males falling to the right of the standard. There are, in fact, relatively few of such specimens, although, even in the distributions graphed without scapula and humerus, there remain a few reasonably large specimens that are likely to have come from wild sheep (especially in Period VI). The evidence is not so convincing as that for goats or cattle (Figures 5.12 and 5.4), however, perhaps because sexual dimorphism in size is not so great. (Of course, if the distributions of log differences for the scapula and humerus were not allometric phenomena but due to differential representation (see above), then larger and presumably wild sheep would be that much better represented as is evident from the overlying set of curves in Figure 5.16.)

Once again, as for goats, the curves are basically unimodal. This probably reflects the same phenomena discussed above, namely natural allometric variation and the inclusion of specimens from young males in the modal divisions. The major exception is the curve for Yahya IVC.1 including scapula and humerus, a curve that is also most markedly different from its overlying sister. Given the constraints of small

assemblage size and the problem of allometry, no attempt shall be made to interpret this phenomenon.

As do wild goats, wild sheep (<u>Ovis orientalis</u>) occur today in the mountains throughout Iran. An young male captured north of the Shah Maran-Daulatabad basin was photographed in Daulatabad village in 1971 (Plate XII). These animals apparently prefer less steep areas than do goats and their flight behavior involves running across their pastures and even down a valley as opposed to climbing up into precipitous ridges (e.g., Valdez and Alamia 1977). One would suspect that this behavior would make wild sheep more vulnerable than goats to prehistoric human hunting. Given a choice, sheep prefer grazing to browsing and thus wild sheep are also more vulnerable to the effects of overgrazing by domestic flocks. For these reasons, perhaps it is no accident that there are no large sheep bones represented in Figure 5.15 for temporal units Yahya VI-V, V, and V-IVC. By those periods (c. 3700-3300 bc), the wild sheep may have largely disappeared from more accessible areas in and around the Soghun valley, making a comeback only later, after the area had become largely depopulated at the end of the 4th millennium bc. Large goat specimens are also poorly represented in those same temporal units (Figure 5.11) and so wild goats, also, may have been affected. Given the small sizes of the assemblages and the fragmentary nature of the specimens, however, these ideas can remain, at best, only tempting hypotheses.

In sum, domestic sheep (<u>Ovis aries</u> Linnaeus 1758) and probably wild sheep (<u>Ovis orientalis</u>) are attested in the faunal remains from Tepe Yahya, south side, periods VII-IVC and Tepe Gaz Tavila/R37. Bones

from domestic sheep clearly dominate the *Ovis* assemblages, and it appears possible that there might have been something of a size diminution over time in the animals represented although, given the small sizes of the sheep bone assemblages involved, this apparent general trend may merely be due to chance. Uerpmann (1979: diagramm 2) documents medians for western Asiatic sheep of c. -.015 for the early Neolithic, -.043 for the ceramic Neolithic, and -.028 for the Chalcolithic of the Amuq (Levant) and Bronze Age of Jericho. The only Yahya medians markedly smaller than those from western sites are for Yahya V (both curves: -.0545 and -.0565) and Yahya IVC.1 (curve without scapula and humerus: -.071). In contrast, all medians for the Neolithic periods at Mehrgarh (Baluchistan, Pakistan) are higher (larger) than most of those for Yahya/R37, the median only reaching -.026 for the sheep material from the combines later assemblages at Mehrgarh (Mehrgarh III-VII, c. 4100-2100 bc: Meadow 1984a: figure 3). Overall, the situation for sheep is less clear-cut than that for goats, although if a generalization had to be made it would be that the sheep of Yahya/R37 appear more similar in size to those of the west than to those of the east, at least for the earlier part of the sequence.

5.5. CATTLE AND CAPRINE DEMOGRAPHICS

5.5.1. Introduction

The term "demographics" is used here, rather loosely, to refer to the age and sex profiles derived from the cattle and caprine assemblages from the south side of Tepe Yahya, periods VII-IVC and Tepe Gaz

Tavila-R37. At their best, such profiles accurately represent patterns of animal utilization that reflect choices made by human herders about what animals to keep and at what ages to cull them from the herd and by human provisioners and consumers about the kind and quality of the meat they eat. At their worst, the profiles contain such a heavy overlay of depositional and preservational "noise" that any "signal" about species ratios and kill-off patterns is effectively "jammed" or transformed into something quite other than what was originally "broadcast." Further complications are provided by difficulties in distinguishing sheep from goats and by imprecisions inherent to ageing techniques based on gross morphology.

In his often cited paper, Sebastian Payne (1973) presented three kill-off models for sheep and goats. The one for meat production (model A) posits greatest slaughter of males between the ages of 18 and 30 months by which time growth in caprines, although still occurring, has slowed down. The model for milk production (model B) proposes that most of the young males be killed off as soon as milk yield is ensured, i.e., before 4 months of age. The final model (C) is one for wool or hair production in which maximum conservation is practiced for both sexes. Of course, in any herd infant mortality will be present, and there will be animals that fall sick or receive injury and thus have to be culled before they otherwise might be. These factors provide elements of "noise" to "ideal" systems and were considered by Payne when he developed his models (Payne 1973: figures 1-3).

More recently, Richard Redding (1981, 1984) has reviewed what is known about the biology and husbandry of domestic caprines in the Middle

East today. Considering factors of caprine behavior, reproduction, and physiology as well as the nature of sheep and goat products and using the approach of optimal foraging theory, he has provided models for energy (milk) optimization, protein (meat) optimization, and herd security optimization as reflected in the ratio of sheep to goats, the age structure, and the sex ratio under differing environmental and productive conditions. For energy and protein optimization, Redding (1981: 299-305) argues that males should be most heavily killed off between 21 and 27 months under good environmental conditions and somewhat earlier in more arid or overgrazed circumstances, which are also conditions under which somewhat greater numbers of males will be retained for breeding and goats will tend to be preferred over sheep. To maximize herd security, male kill-off is best spread over a longer period with peaks in the 9-12 month and 15-24 month (Redding 1981: 305-307). Here consideration is not for killing an animal when its rate of growth has begun to slow down, but for ensuring survival of the herd as a viable productive unit and minimizing the effects of fluctuations caused by disease and other factors. Animals are thus culled from two age groups instead of one, the two being relatively young because it is deemed "uneconomic" to to maintain non-productive stock to a point where food consumed is employed by the animal more for maintenance than weight increase. Again, Redding argues that kill-off will be even earlier and that goats will outnumber sheep under conditions of environmental stress. He also contends that the husbandry tactic modeled by Payne for milk optimization is unlikely to be employed except under conditions of market production and, for that reason, can be excluded from

consideration for pre- and protohistoric village societies in the Middle East (Redding 1981: 299-300). For the same reason the running of all-male herds for wool or hair production seems unlikely except under special, urban-related circumstances.

A third series of expectations as to the kill-off represented in bovid remains have been generated by Melinda Zeder (1984, 1985). She proposes that the nature of the remains found on urban sites with populations removed from actual animal husbandry will reflect the degree of direct interaction with the pastoral economies of the city's hinterland, the roles of middlemen in provisioning and butchering, and the status of the individuals consuming the meat. Thus, direct contacts with animal producers will provide the opportunity for a wider range of species and age groups to be represented than will be the case if intermediaries are involved. Middlemen will tend to focus on animals of greatest yield per unit and thus will select, to the degree possible, larger animals in their prime including cattle and older (= larger) caprines. High status consumers might prefer tender young animals for which a premium would need be paid. Thus, not only can one expect change through time in the configuration of the faunal data, but also patterned variation through space as represented by the various quarters of an urban site.

Common to the discussions of Payne, Redding, and Zeder are a number of features. They all agree that young male caprines are the most expendible (with the exception of when they are exploited for wool or hair) and that females will be maintained until they become infertile or die of natural causes. Key to interpretation is the age at which the

males are killed off, although the consensus appears to be that males not needed for breeding or other purposes rarely will be permitted to reach their fourth year. Also common to their discussions is the assumption that the herders and provisioners are trying to optimize at least some aspects of their husbandry or exploitive strategies. Redding's finding that optimization for herd security is the most characteristic feature of traditional, non-urban, societies seems intuitively reasonable, particularly if rephrased as minimization of risk. None of the three researchers found really good fits between the implications of their models and the faunal data they attempted to interpret in light of them although general congruence was noted in a majority of cases. Sources of deviation that have been discussed include real differences between predicted and actual practices, depositional and post-depositional filtering of faunal assemblages, and the imprecise nature of criterea for determining age, sex, and species.

Finally, none of the models proposed, except for some of Zeder's, is concerned with cattle. Gudrun Dahl and Anders Hjort (1976) have dealt extensively with cattle, as well as caprines and camels, in East Africa. Redding (1981: 81-85) has convincingly argued that their data on reproduction in caprines are not applicable to the Middle East because seasonality of breeding is less marked, and indeed disappears altogether, the closer one approaches the equator. The same is not true for cattle, however, which breed throughout the year at whatever latitute (Hulet, Alexander, and Hafez 1975: 256). Furthermore, the cattle of eastern Africa are principally zebu, a form that has been determined as present in the faunal assemblages of southeastern Iran

(see Section 5.2). Thus some reference to Dahl and Hjort's work will be made in the following discussion. Even they, however, do not deal with what is the principal product of cattle for agricultural societies: ox power. While the females can provide milk and offspring (as do the caprines), the males (and females as well, for that matter) can provide the traction necessary to pull agricultural implements and, in the absence of domestic equids and camels, act as pack animals. For these purposes castrated animals are traditionally used today, this helping to solve the problem of tractability while ensuring sufficient non-offspring-producing animals to meet peak demand. The development of this solution is poorly understood, however, principally because of the fragmented nature of most prehistoric faunal collections. In an influential paper, Sherratt (1981) has argued that "secondary products" such as milk, wool, and traction did not become important until the mid or late fourth millennium BC and thus one might not expect castration to have become widespread until at least that time.

The principal tools used to monitor kill-off are epiphyseal union of long bones (sometimes including scapula and pelvis) and the eruption and wear of teeth. Sex patterns can be studied by tabulating sexually dimorphic traits of the horncores and pelves as well as by plotting the distributions of bone measurements. Each of these topics is treated in turn below with reference to the Tepe Yahya and Tepe Gaz Tavila-R37 data.

5.5.2. Sex Ratios

5.5.2.1. General considerations

The ratio between newborn male and female cattle and caprines is about 1:1 under traditional systems of herd management (Dahl and Hjort 1976: 28, 88). Because all animals eventually die, they all have the chance to be represented in the archaeological record and thus sex ratios determined from faunal assemblages also should be about 1:1. This is rarely the case, however, for a number of reasons. Identification of sex is often difficult from the bones of young animals, particularly if fragmented, as sexually dimorphic characters of morphology and size are not fully developed. The bones of young animals, being less "dense" (Binford and Bertram 1977: 108-109), are also more susceptible to destructive forces including fragmentation during butchering and food preparation, the ravages of carnivores and rodents after discard, and exposure to the elements and to the weight of sediment and abrasion following deposition.

Given these circumstances and assuming that there is not differential deposition in a given part of a site of the bones of males and females of the same age group, one can draw up a set of general expectations. Under conditions of husbandry where males are killed young, bones with identifiable female characteristics should greatly outnumber those with male characteristics. Furthermore, metrical data should produce a distribution heavily weighted toward the female size range because unfused long bones and compact bones from obviously young animals are usually not measured. Under circumstances where there is no differential culling according to sex, the ratio of bones identifiable

as male and as female should be more even. The practice of castration will tend to blur the picture somewhat because certain morphological and metrical traits of castrates are intermediate to those characteristic of males and of females.

Boessneck, Muller, and Teichert (1964: 78-95) and Boessneck (1969: 344-347) have reviewed sex differences in the pelves of the caprines (see also, here, Table 5.18) while Lemppenau (1964) has done the same for central European ruminants. Their work is based on observations made as early as the mid-19th century (see Lemppenau 1964: 7 for a review). In uniparous mammals that give birth to relatively large young (including all bovids), the birth canal of the female must be able to accomodate that foetus. As a result, the areas of bone surrounding the birth canal tend to be gracile, the more so as a female gets older and has borne more young. This relative gracility is present even in females that have never given birth although it is not so marked in these younger animals and thus harder to make a securely based sex determination particularly on the basis of fragmented material. (Note that "pelvis" or, plural, "pelves" is used thoughout the following discussion even where, more properly, the term "innominate" should be employed. As noted by Flower (1885: 315), "The two innominate bones, together with the sacrum, constitute the pelvis, a complete circle of bone, or rather a short tube.")

Sex determination can also be made on the basis of the horncores in caprines and cattle. There are only small fragments of cattle horncores preserved in the Yahya and R37 assemblages and thus the observations summarized, for example, by Grigson (1982a) are not applicable to this collection. As for the caprines, determination of sex from horncores was discussed in Section 5.4.

While horncore and pelvis specimens often can be sexed individually on the basis of morphology alone or morphology supplemented by measurements, the use of measurements by themselves will tend to produce a range of values for each skeletal part with one or two clusters or modes, these sometimes identifiable as representing females and males if sexual dimorphism in size is marked. One of the most elegant uses of modes is that by Brian Hesse (1978: 271-299, 1984: 251-259) on caprine material from Ganj Dareh (western Iran, 8th-7th millennium bc). Following the lead of Charles Higham (1967, 1968, 1969, and Higham and Message 1969), Hesse plotted histograms of individual dimensions for selected sheep and selected goat skeletal parts (astragalus, distal humerus, first and second phalanges, distal metapodials, and calcaneum). Modes were identified by inspection, and degree of separation was estimated using the coefficient of difference statistic (Mayr 1969: 189). "All results indicated strong separation of the modes which implied that their relative size could be taken as an estimate of the proportions of the sexes in the samples" (Hesse 1984: 251). Each of the "samples," in fact, represents an age group. The astragalus sample is used to represent the ratio of males to females at about 4-6 months of age because that skeletal part is not generally identifiable to genus

for younger animals, and it is a "non-fusing" compact bone and thus should represent all animals killed, of whatever age. The distal humerus is used for 8-10 months, the phalanges for 13-16 months, the distal metapodials for 18-28 months, and the calcaneum for 36 months (ages following those of Silver (1969) for sheep; use of the data of Noddle (1974) for feral goats provides somewhat different age ranges although the sequence is the about the same). Thus, a "harvest profile" could be calculated for each sex.

Unfortunately, it has not been possible to successfully use Hesse's techniques for the Yahya/R37 material. An attempt to do so revealed that sample sizes are too small if the collection as a whole is divided by period. Even if the assemblages of measured sheep, goat, and cattle elements are examined on a site-wise basis without consideration for change through time, it is often not possible to identify two modes that can be reasonably interpreted as representing males and females. The largest measured collection is that for goats. When measurements for the various postcranial elements are arrayed, in all cases there is a marked peak that probably represents the female mode but usually there is no clear peak that might represent males. This, in itself, may indicate a severe scarcity of bones from male animals among the measured specimens but it may also reflect a lesser degree of sexual dimorphism in the domestic stock of southeastern Iran than in the earlier, principally goat, material from Ganj Dareh. A further complication is the presence of bones from wild animals in the Yahya collections (documented in Section 5.4.). Many of the largest specimens, in fact, may represent these and not domestic males at all. A final difficulty

is the fact that a majority of the caprine specimens for which state of fusion could be ascertained were not identified to genus. Thus the "survivorship curves" compiled for the caprines together can not, in any justifiable fashion, be divided to represent the survivorship of sheep and goats separately (see below for further discussion).

5.5.2.2. Cattle

Data on sex and age for cattle pelves are displayed in Table 5.23. None of the 4 specimens from Tepe Gaz Tavila-R37 were sexed and none are clearly from animals under about 10 months of age. (Age greater or less than about 10 months was determined not only by state of fusion but by the nature of the bone surface and structure. This permitted a greater number of specimens to be identified as young than if state of fusion alone had been relied upon.) For Tepe Yahya, all sexed cattle pelves from period VII contexts are from "not young" females. Of the aged specimens, 25 percent come from young animals, this being the highest percentage for any period at the site. Such a pattern is consistent with a "meat use" for cattle during period VII, with young males being killed off early and females being permitted to live through reproductive age. For the rest of the periods of Tepe Yahya represented in this collection, there is only one pelvis fragment identified as coming from a young animal and this is from period VI. For Yahya VI and V, there are 3 male pelves identified in each and 1 and 3 female pelves respectively. This distribution contrasts with that for period VII and can be seen as more consistent with the use of cattle for draft. Yahya IVC produced only a single sexed (female) and a single aged (not young)

pelvis fragment. On the basis of such a sample it is difficult to ascertain any patterns.

Turning now to measurements, as was noted in Section 5.2 and illustrated in Figure 5.4, swings in the major modes for dimensions plotted using the difference of logs technique may indicate variations in the number of male and female specimens in the measured assemblages. Thus, the major mode for Yahya VIIE-C is well to the left of the median for that temporal unit and may represent a relatively high proportion of females in that collection. With Yahya VIIB, the mode swings to the right (toward being larger) where it remains, with some drifts to the left, until Yahya IVC when a distinctly bimodal distribution is evident. In addition, there is a minor shift to the right of all medians after Yahya VIIB. These patterns can be interpreted to indicate that during Yahya period VII there is a tendency for an increasing number of bones of older male animals to appear in the collections. This is consistent with the pattern of fewer pelves from young animals noted above. These observations will be examined again when the age structure of the assemblages is discussed.

5.5.2.3. Caprines

Data on sex, age, and genus identification of caprine pelves are listed in Table 6.24. For Tepe Gaz Tavila-R37 there are twice as many pelves identified as goat than as sheep. Of the specimens identified to genus, the only male and only young innominates come from goats. For caprines overall, some 35 percent of the aged pelves come from young animals, "young" meaning less than about 8 months of age, as determined from bone

surface and structural characteristics and state of fusion. Again overall, the ratio of female to male pelves is 1:1.67, which is the closest to an even ratio for any of the assemblages.

Period VII at Tepe Yahya provides the most uneven ratios of sheep to goats (1:2.40) and males to females (1:18) of any group of pelves at the site. Both ratios become progressively more even through periods VI and V with the trend continuing into Yahya IVC.2 in the case of the sex ratio. The highest proportion of young occurs in period V (c. 35 percent) and the lowest in IVC.1 (22 percent). There is little obvious patterning in the statistics for sheep and goats when examined separately except perhaps that when male pelves of sheep begin to turn up in Yahya V, the ratio of males to females is more even for sheep than for goats.

Although less so than in the case of cattle, the caprine pelvis statistics are still based on very small samples with the result that identification and interpretation of trends must remain tentative and be tested against other sources of information. In all cases pelves identified as male are underrepresented when compared with those identified as female. Thus it seems likely that many of those pelves from young animals that were not sexed, in fact, come from males and that many males were being killed off in their first year. Why the sex ratios are so different in the pelvis assemblages from R37 and Yahya VII (assemblages at least in part contemporary), however, is less easy to interpret. One might attribute it to chance except that the same pattern of males being relatively more frequent than females at R37 occurs in the case of the goat horncores (Table 5.19) where the male to

female ratios are 1:2.6 for Yahya VII and 1:0.58 for R37. Examination of the measurement data, however, shows the opposite tendency with the assemblage of measured goat bones from R37 (Figure 5.12) coming, on the whole, from smaller animals (mode and median more to the left ?= more females) than is the case for Yahya VII. This discussion will be taken up again in the next section when "survivorship" data are considered.

With reference to the goat horncore data from Tepe Yahya (Table 5.19), the pattern of an increasingly more even ratio of males to females from period VII to period IVC, while not confirmed, is not clearly negated either (VII - 1:2.6, VI - 1:1.5, V - 1:1.67, IVC - 1:2). Again, the major difference seems to be between Yahya VII and the later assemblages, with females being considerably more more common in the former. As noted in Section 5.4, all sheep horncores except (possibly) one come from males. This may be due to hornlessness in female sheep.

Finally, with reference to measurements, all of goat curves illustrated in Figure 5.12 appear to have dominant modes in what is probably the female size range. Some of the curves have secondary modes farther to the right (but still to the left of the zero-line) that may represent males. Because these curves combine specimens that fuse at different times or have only one center of growth (e.g., the astragalus), they represent a composite picture. As noted above (Section 5.5.1.), plotting of measurements element by element confirms the pattern for goats of a dominant "female" mode on a site-wide basis for all elements no matter what the age of fusion (dimensions are listed in Appendix 2).

For sheep, the situation appears somewhat different than for goats. A dominant mode that can be clearly defined as representing females is less obvious for most of the curves of Figure 5.16, the sole exception being Yahya V which is clearly bimodal (in the case of the curve that does not exclude scapula and humerus measurements). If the two modes of that curve can be taken as representing females and males, then the other curves, most of which are relatively flat (especially when compared with the goat curves), would seem to suggest the presence of relatively more bones from older males than was the case for goats. When the dimensions are arrayed by element independent of temporal unit, however, this interpretation cannot be confirmed, the resulting patterns being like those for goats with a major mode in what may be the female range and no identifiable mode or sometimes a minor mode in the male range. The phenomenon of flatter curves in Figure 5.16 appears, in fact, to be a function of the standard used for computing the difference of logs, as was discussed in Section 5.4.

5.5.3. Kill-off

5.5.3.1. General considerations

The approximate age at death of an animal can be determined by the state of eruption and wear of the teeth and by the state of fusion of the bones. The principal problem with both approaches is that there can be large variations even within the same breed of animal in the exact age at which individual "ageing events" take place. These variations are attributable to breed, sex (or loss therof), diet, state of nutrition, and type of pasturage among other factors (papers in Wilson, Grigson,

and Payne (eds.) 1982).

The classic reference for ages of epiphyseal union in domestic animals is Silver (1963, reprinted 1969). Silver included no data for goats, however, epiphyseal union in that genus having been discussed subsequently by Noddle (1974) and Bullock and Rackham (1982) among others. Their studies reveal the enormous variability in the timing of fusion and the somewhat different sequence in goats from that defined by Silver for sheep. These data as well as the cogent discussion by J.P.N. Watson (1978) are almost enough to lead one to discard timing of epiphyseal union as a valid tool for studying kill-off patterns. Because it is difficult to say what he says any better, Watson (1978: 97; references deleted) is quoted at length at this point:

> The principle of the approach is as follows. For any given skeletal element (e.g. the proximal end of a radius) the proportion of specimens in the sample that are fused is calculated. It is then inferred that this represents the proportion of the animal population that survived to an age greater than the age of fusion of the element.
>
> Various objections can be raised to this procedure. Differential destruction of unfused specimens relative to fused ones is the most serious difficulty, while the selection of fused specimens for the manufacture of bone tools is another potential distorting factor. Differential recovery is a source of bias in unsieved samples. Ages of fusion vary from breed to breed and may not have been the same in the past as they are now, as well as being greatly affected by castration. The definition of the moment of fusion may not be the same in live animals as it is in archaeological material, since if x-rays are used they will cease to show a gap between the shaft and the epiphysis long before fusion is complete. Even the method of calculating the proportion of fused specimens is controversial, being inseparable from the problem of differential destruction. Finally, sampling error is an important factor at all but the richest sites.
>
> However, even if all these practical difficulties could be overcome, the approach would still be invalid. The mistake lies in treating a range as if it were a point. If a given element fused at exactly the same age in every individual in a

> population, the method would be reasonable enough, but in reality there will inevitably be a considerable age-range over which the element will fuse, even in a homogeneous population, as those who use the method themselves imply. An individual killed within this age-range may have the element either fused or unfused. Thus a fused specimen may come from any animal older than the lower end of the age-range, while an unfused specimen may come fron any animal younger than the upper end of the age-range.

Watson's objections to the use of epiphyseal union are certainly relevant to the Yahya/R37 assemblages. Tables 5.25 and 5.28 reveal that there is differential destruction particularly of late fusing elements which are poorly represented in comparison with earlier fusing skeletal parts such as the distal humerus and proximal radius in caprines and the phalanges in cattle. The dearth of caprine distal metapodials in the collection has already been noted as possibly being the result of selection for tools while the shortage of caprine phalanges is due, at least in part, to recovery procedures (Chapter 5 and Figure 5.14; further discussion of recovery and taphonomy are to be found in Chapters 7 and 8). Already noted is the fact that Silver's ages of fusion for sheep will not be completely correct for the goats that dominate the Yahya/R37 collections. A further complication is the fact that, in the majority of cases where state of fusion was determinable, it was not possible for this researcher to identify the specimens to anything more specific than "caprine." Finally, sampling error is also clearly a problem. Numbers of specimens that reveal state of fusion for the various temporal units, even grossly grouped into periods, are small particularly for cattle.

In view of the problems with the approach, serious consideration was given to not calculating "survivorship curves" for R37 and Yahya based on fusion data. This option was rejected, however, and curves were constructed (Figure 5.17 based on Table 5.25 for cattle, Figures 5.22 and 5.23 based on Table 5.28). This was done principally to ascertain if there are any consistent patterns evident in groups of data handled in the same fashion. Emphasis is placed primarily on the patterns and trends revealed and not on details of the results. Age data is employed, however, in an attempt to compare curves calculated from epiphyseal union data to those calculated from tooth eruption and wear. Taking account of Watson's observations about point versus range estimates of age, all curves with age on the x-axis are plotted twice - once for each extreme of the range for age of fusion.

The "survivorship curves" are formed on the basis of fusion scores (following Redding 1981: 248). Fusion scores are calculated by assigning a value of unity to a fused specimen, zero to an unfused specimen, and one-half to a fusing specimen (epiphyseal line obvious). Values for each skeletal part or group thereof are then totaled, multiplied by 100, and divided by the total number of specimens involved. Skeletal parts that are thought to fuse at approximately the same time are grouped into "stages" (I-V for cattle, I-VII for caprines) and fusion scores calculated for the resulting groups for each temporal unit (R37, Yahya VII, VI, V, IVC for cattle and the same with IVC subdivided into IVC.2 and IVC.1 for caprines). These scores are then plotted with the fusion score along the y-axis and increasing (estimated) age along the x-axis. Estimated ages are based on Grigson

(1982: appendix 3) for cattle and Silver (1969: Table A for sheep) for caprines. The problems with using these estimates have already been noted. They are employed to reveal possible spacings for the stages and slopes for the curves. One characteristic of the technique is that the "survivorship" (the proportion appearing to survive beyond a given stage or age) is calculated anew for each skeletal part or group thereof. This leads to rebounds in the curve instead of the expected continuous downward slope. These rebounds graphically reveal, better than any discussion, the difficulties of using the technique since they reflect all the problems of sampling, differential survival, recovery, and so on that were noted by Watson (see above).

In contrast to "survivorship curves" based on patterns of epiphyseal union, those based on tooth eruption and wear do not suffer the problem of rebounding because the proportions for each defined stage are calculated on the basis of the total assemblage of mandibles or maxillaries and not independently stage by stage. One result of these different methods for calculating "survivorship" is that curves based on epiphyseal union can be made to "float" relative to the x-axis. The curve as a whole can be moved "up" or "down" along the y-axis depending upon the degree of underrepresentation perceived for unfused epiphyses, and the value for one point can be varied without affecting the value for any other point. When proportions are based on the totality of an assemblage, however, a change in one produces changes in all others. Thus curves based on tooth eruption and wear are fixed relative to the both axes and are much harder to "juggle" according to the analyst's perceptions of depositional, taphonomic, and recovery factors.

"Survivorship curves" for the Yahya/R37 assemblages that are based on tooth eruption and wear were constructed on the basis of both maxillary and mandibular teeth for cattle (Figures 5.18-5.21 based on Figure 5.18 and Tables 5.26-5.27) but only using mandibular teeth for caprines (Figure 5.24 based upon Tables 5.29-5.30 and Figures 5.25-5.29). Many analysts employ only jaws with teeth still in place for the construction of such curves (e.g., Payne 1973 and his followers). For the Yahya/R37 assemblages, however, an attempt was made to use all cheekteeth whether in place or loose, whether identifiable to place in jaw or not. This was accomplished in the following fashion.

Jaws with teeth were "seriated" or arranged in order from youngest to oldest according to state of eruption, degree of wear, and enamel crown height (for molars only, measured on lingual side for mandibular teeth, buccal side for maxillary teeth, as the least enamel height in mm between the tip of the "root valley" and base of the "cusp valley"). Stages were then defined on the basis of the features noted in Table 5.26 for cattle (stages A-J) and Table 5.29 for the caprines (stages A-I). These definitions rest principally on eruption and wear and not on crown heights, which consequently can be seen to overlap between the different stages. (Crown height ranges are reported in Table 5.29 for the caprines but not in Table 5.26 for cattle because the small sample size for cattle meant that crown heights were of minimal importance for allocating teeth to stages; see Appendix 2 for individual crown height measurements.)

Another approach, of course, would have been to define the stages on the basis of crown heights (as, for example, in Klein, Allwarden, and

Wolf 1983; Klein and Cruz-Uribe 1983, 1984: 46-62) or crown height indices (Ducos 1968: 9-14) and allocate according to wear those teeth for which crown heights could not be ascertained. In view of the fact that it is not possible to measure crown heights in the incompletely grown teeth of younger animals and considering the difficulties of distinguishing sheep teeth from goat teeth (see below), it was decided to allocate initially according to eruption/wear and only thereafter to sort according to crown height. A specimen that could not be assigned to a single stage because place in jaw was not identifiable (many first and second molars), because it was broken, or for some other reason was assigned a range based on those characters that were preserved. These stages and ranges were then represented graphically following the example of Hesse (1978: 260 and Hesse and Wapnish 1985: 104). Finally allocations for each stage were calculated from the diagrams (Figure 5.18 for cattle and Figures 5.26-5.29 for caprines) and tabulated according to value, percentage within stage, and percentage older than stage (Table 6.27 for cattle and Table 6.28 for caprines). The last set of percentages provides the "survivorship curve" while the second indicates the kill-off within each stage.

Age ranges are assigned to the tooth eruption and wear stages based on the field studies in Anatolia of Deniz and Payne (1982) for goats and on data compiled by Higham (1967: 104 ultimately derived from Silver 1963) and Ducos (1968: 13) for cattle. Ducos correlates his ages with tooth wear indices (crown height divided by tooth breadth) and thus it is on the basis of such indices (calculated from data in Appendix 2) that ages are assigned to stages G-I for the mandibles and F-I for the

maxillaries. Cattle maxillaries are employed in addition to mandibles because age estimates for adult animals are available. The same is not true for the caprines for which only good mandible data is available, and this only for goats. Thus, whereas analysis of epiphyseal union for caprines is based on modern sheep data, analysis of tooth eruption and wear is based on modern goat data. This situation may have some bearing on the non-congruence of the patterns generated by the two approaches.

When the Yahya/R37 collection was analyzed, it was deemed difficult or impossible to distinguish the mandibles of sheep from those of goats and thus they, like the long bones, are treated together here. After analysis was completed, Payne (1985) described characters useful to distinguish the mandibles of young sheep and young goats from one another (based on dP3, dP4, and M1 in early state of wear). These have not been utilized for this study although a review of all dP4 (=D3) specimens in the collection reveals the following configuration: 40 _Capra_, 19 _Ovis_, and 10 O/C. These ratios confirm what had been postulated on the basis of the post-cranial data, namely that although the collection is heavily dominated by goat mandibles and teeth, those of sheep can be expected to make up about one third of the total. This is an important consideration, particularly when analyzing crown heights, because sheep teeth tend to be more hypsodont that those of goats. Thus one can expect relatively higher crowns for sheep particularly in the younger age stages. Through the lifespan of an animal, however, the differences will tend to narrow as a sheep's teeth tend to wear more quickly than those of a goat due to different foraging patterns (more grit in grazing, less in browsing). This is another

reason why crown heights were not used as the principal character in defining age stages in caprines.

Finally, it is necessary to emphasize that what is being examined through the patterns of kill-off is just that, i.e., trends in the selection of animals for slaughter. The graphic devices that are employed in this task as a visual aid are called "survivorship curves" meaning that they purport to reveal the proportions of animals that survived certain ages that are represented by fusion classes or the end-points of tooth eruption and wear age ranges. In fact, the term is a misnomer, because what we are doing is graphing fusion scores and cumulative percentages derived from assemblages of bones and not census data from populations of living animals. Because "survivorship curve" is frequently used in the zooarchaeological literature and is a convenient shorthand, it is also used here, but is always placed between quotation marks.

5.5.3.2. Cattle

"Survivorship curves" for cattle based on epiphyseal union that are plotted in Figure 5.17 appear to reveal a more or less continuous trend toward later kill-off. Unfused bones are relatively much more common at Tepe Gaz Tavila-R37 than at Tepe Yahya although a glance at Table 5.25 shows that the size of the R37 collection is extremely small (16 specimens). Unfortunately, the apparently early kill-off for R37 cannot realistically be checked against eruption and wear data because of the even fewer jaw remains (Table 5.1: 1 mandible with teeth and 6 loose teeth) all of which, however, come from older animals. For Yahya VII

and VI, the total number of long bone specimens revealing state of epiphyseal union is much greater (116 and 136 respectively), dropping back to lesser numbers for Yahya V (55, 40 of which are phalanges) and Yahya IVC (34, more evenly distributed; see Table 5.25). The curves for Yahya V and IVC have been combined in Figure 5.17 because of the absence of any Period V bones from the last fusion stage and the overall similarity of the fusion scores in the earlier stages.

From the fusion scores as plotted in Figure 5.17, there appear to be few bones of very young cattle (before stage IV) at Tepe Yahya. For Yahya VII, the major time of kill-off is revealed as stage IV with the fusion score dropping from a low of 84 (stage I) to 53 (31 points). The drop for Yahya VI in stage IV is only from 92 to 76 (16 points), the major change occurring with stage V (76 to 50 or 26 points). For Yahya V and IVC, almost no kill-off of young animals is reflected in the fusion scores or in the joint "survivorship curve."

Turning to tooth eruption and wear, the data on which "survivorship curves" are based is summarized in Table 5.27 and displayed for Yahya as a whole in Figure 5.18. There is a clear difference in patterning for mandibular and maxillary teeth with the latter revealing a somewhat earlier kill-off than the former. It may be that the eruption and wear stage definitions for maxillary and mandibular teeth should not be as congruent as they are made to appear in Table 5.26, particularly for the earlier stages. Note, in fact, that the estimated age ranges listed for stages F and G in the table are different, with those for maxillaries longer than those for mandibles. Examination of the breakdown of the statistics by temporal unit in Table 5.27, however, reveals that the

patterns for upper and lower teeth are nearly congruent in period VI, only somwhat less congruent in periods V-IVC, but markedly different in period VII where there is also the greatest difference in sample size with 44 maxillary specimens and 25 mandibular ones. This variation, therefore, may be due to accidents of "sampling" and not to problems of stage definition.

Figure 5.19 displays "survivorship" for mandibular and maxillary teeth independent of estimated age. The curves are thus more or less concave relative to the origin for most of the lifespan and convex only at the end. When the curves are plotted with estimated ages on the x-axis, as in Figures 5.20 and 5.21, they are concave for the early months and convex for the remainder of the lifespan represented. All of the figures reveal that the curves for Yahya VI and V-IVC are similar, with those for Yahya VII, and particularly the maxillary curves, being different. Thus the difference between Yahya VI and V-IVC revealed in the "survivorship curves" based on epiphyseal union is negated while that between Yahya VII and VI is confirmed.

The epiphyseal union and tooth eruption/wear curves are all drawn to the same scale and are presented in pairs to show estimated age ranges for the various stages. As noted, the major drop in fusion scores for Yahya VII occurs in stage IV which is estimated as 24-36 months. The major drop for that period in eruption and wear is stage F for mandibles, estimated at 30-42 months and stage E for maxillaries, estimated at 24-30 months. In both cases the drop is about 30 percentage points and takes the curve to a survivorship of about 39 percent for the end of the relevant stage. This is a somewhat lower

survivorship than that reflected in the epiphyseal union curve which is at 53 percent at the end of stage IV and 43 percent at the end of stage V (42-48 months). Thus an underrepresentation of the unfused bones of cattle in all age stages, but particularly in the early ones, appears to be confirmed, although it should be noted that a fusion score of 84 for stage I (estimated 7-10 months) is considerably lower than the 98.7/100 percent older than stage B for eruption and wear (estimated 7-9 months). In any event, it appears that most of the cattle remains in Yahya VII come from animals less than about 42 months of age with a high proportion of the animals being killed off in their third year. This pattern is more consistent with exploitation for meat than for traction and confirms what was said in Section 5.5.2.2. when discussing the pelvis.

As noted, the "survivorship curves" based on eruption and wear for Yahya VI and V-IVC are all quite similar. No stage earlier than stage E has more than 10 percent of the allocations, and in all cases the major drop occurs with stage F (estimated at 30-42 months). The percentages of allocations older than stage F vary between about 41 and 49 percent as compared with about 28 and 39 for Yahya VII. As noted above, patterns of epiphyseal union for Yahya VI indicate fairly even kill-off in stages IV and V (16 and 24 points) with 50 percent surviving stage V (estimated at 42-48 months). Here again, the eruption and wear data suggest an underrepresentation of bones from young animals in the fusion data. On the whole, however, it appears that more cattle are being permitted to survive longer in Yahya VI and V-IVC. Such a pattern would be consistent with an increasing emphasis on traction or with a change

in husbandry practices that permitted animals to put on additional weight before slaughter. Indications from the small pelvis sample that more males were being kept to maturity in these periods are particularly consistent with the first interpretation. From the eruption and wear data, however, there is evidence for the existence of quite old animals (estimated at 78-138 months) in all periods (and including R37). This is a phenomenon that suggests the keeping of special breeding stock or draft animals even in the earliest periods.

In concluding this discussion for cattle, it is important to stress that deriving a clear picture from any single part of available data is not possible. Furthermore, as graphically illustrated in the figures, some of the evidence is contradictory and the amount of possible variation in ages represented by specimens in different states of fusion or eruption/wear is large. Overall, however, a pattern of change between Yahya VII and Yahya VI emerges. One might be tempted to argue that, because the nature of the deposits are so different in periods VII and VI, the reasons for the apparent change are depositional and taphonomic and do not reflect real change in animal exploitation. Such a position can be countered by noting that differences between Yahya VI and V-IVC in the nature of the deposits are even more marked and that the deposits of Yahya V are not dissimilar to those of VII (see below, Chapter 7). It is only unfortunate that, because of the small size of their assemblages, it has not been possible to deal separately with the material from Yahya V and IV or to test the suggestion of a much younger kill-off at Tepe Gaz Tavila-R37.

5.5.3.3. Caprines

"Survivorship curves" based on caprine epiphyseal union are presented in Figures 5.23 and 5.24, which are constructed from the data compiled in Table 5.28. Curves for Yahya VII, VI, V, and IVC are plotted separately with the curve for R37 used in each case for reference. All sets of curves are plotted twice (a&b, c&d on each figure), at both ends of the estimated age ranges for the stages.

The R37 curve, based on 126 specimens showing state of fusion, is the only curve without an instance of rebound even though numbers of specimens, particularly for stages III, V, and VII, are small (6, 4, and 9 specimens respectively). The curve drops precipitously with a fusion score of only 17 for stage VII (estimated as 36-42 months for sheep, but perhaps considerably older; see Bullock and Rackham (1982) where fusion in feral male goats from Scotland for this stage was found to range between 60 and 72 months; Noddle (1974), however, records ages even younger than those of Silver (1963/1969) for sheep!). The greatest drop in fusion scores occurs between stages V and VI (22 points) with large drops also between stages II and III (18 points) and III and IV (15 points). A score of 50 is reached by stage V although the difference between stages V and IV is only 2 points (52 in stage IV).

The epiphyseal union curve for Yahya period VII (based on 336 specimens) follows that of R37 closely until stage VI at which point kill-off appears to be less and there is a rebound from a fusion score of 38 in stage VI to 56 in stage VII. (One reason for the rebound may be an underrepresentation of unfused distal femora and proximal tibiae.) The lowest score reached is 38, which is considerably above the 17 for

R37. The greatest drops for Yahya VII occur before stage I (16 points) and between stages II and III (25 points). The drop between stage II and stage IV, however, is the same as that for R37 (33 points). A score of 50 is reached by stage IV although, again, the difference between stage IV and V is slight (3 points).

With Yahya period VI (211 specimens), the change toward increasing representation of older animals continues. The lowest points of the curve are fusions scores of 61 and 60 reached in stages V and VII respectively. Between, there is a rebound to 70 while in stage IV there is a rebound to 89 after a score of 73 in stage III. The greatest difference in scores (discounting rebounds) is between stages II and III (21 points). The difference between stage II and stage V scores is 33 points, which compares with 36 points for Yahya VII and 35 points for R37. Thus, the real change in kill-off appears to occur only with the later stages in which there is very little additional kill-off evident in the Yahya VI fusion data. This may be due to underrepresentation of unfused bones, however. With Yahya VI, there is also the beginning of a trend toward lesser kill-off in stages I and II, a trend that is extended to include stage III in subsequent periods.

With Yahya period V (176 specimens, the lowest for Yahya), the decrease in kill-off in the earliest stages becomes marked. The lowest score in the first three stages is 88 (stage I with a rebound to 98 and 93 in stages II and III), decreasing only to 79 by stage IV. The major drop of 24 points occurs between stages IV and V, and the lowest score reached is 45 in stage VI (rebounding to 67 in stage VII where, again, there is probably an underrepresentation of unfused specimens).

The Yahya period IVC assemblage of bones with evidence for state of fusion is large enough to permit subdivision into specimens from IVC.2 and IVC.1 (336 and 263 pieces, respectively). Much of the Yahya IVC.2 material was screened, and thus recovery should be fairly complete as, indeed, is attested by the relatively large number of phalanges. There is only a minor rebound in stage VII (and no rebound in IVC.1, deposits from which were screened to a lesser extent than from IVC.2). The patterns for both subdivisions of Yahya IVC are quite similar (Table 5.28) and thus they were combined into a composite curve (Figure 5.23), which is remarkably similar to that for Yahya V. The lowest score for the first three stages is 86, dropping to 76 in stage IV, to 60 in stage V, and to 51 in both stages VI and VII. As in Yahya V, the major drop occurs between stages IV and V (but here only 16 points). As will be shown, however, the similarity between V and IVC in the "survivorship curves" from fusion data is not confirmed by the tooth eruption and wear data.

Turning to caprine tooth eruption and wear, the data tabulated in Table 5.30 (based on criteria defined in Table 5.29 and data displayed in Figures 5.26-5.29) is displayed in Figures 5.24 and 5.25. The top half of the two figures are "survivorship curves" drawn with estimated age along the x-axis. That axis in Figure 5.24 reflects the older end of the age range for each stage, in Figure 5.25 the younger end of the age range. The left part of each set of curves approximates the area covered by stages I-VI of the epiphyseal union curves (Figures 5.22 and 5.23). The bottom half of each figure shows the amount of variation within periods VII, VI, and IVC based on a partitioning of the data by

temporal units within each period. Figure 5.24b depicts the variation as a range on either side of the value for the grouped data while Figure 5.25b is comprised of individual curves for each temporal unit plotted in relation to the curve for R37. Figure 5.24b also shows clearly the percentages of allocations to each stage as well as variation within these.

Figures 5.24 and 5.25 reveal that the greatest differences in kill-off patterns as reflected in tooth eruptiona and wear are between R37 and Yahya V (101 and 78 specimens, respectively: Figures 5.26a and 5.29a). For R37, the percentage of allocations rises steadily from stage B to E where it peaks at nearly 28 percent. After that, allocations fall precipitously to under 12 percent in stage F and steadily thereafter. In contrast, for Yahya V, allocations only start to rise with stage D, reach a sudden peak in stage E (at a level about equal to R37) and stay high in stages F and G (above 20 percent in each) before dropping somewhat in H (to 13 percent).

For the other periods at Tepe Yahya, the picture cannot be presented so simply because of the possibility of examining chronological variation within each temporal unit. If only the overall values are examined, however (Figures 5.24a and 5.25a and Figure 5.24b: geometric devices), there appears to be a continuous decrease in the representation of mandibular fragments assigned to stage C (estimated 5-15 months) from Yahya VII (about equal to R37), through Yahya VI, to a low in Yahya V. There is then a major rebound in Yahya IVC to a percentage level even higher than those for R37 or Yahya VII. This would appear to confirm the picture outlined by the epiphyseal union

data of decreasing kill-off of young animals from Yahya VII through V, but contradicts the epiphyseal union data for IVC. The exact opposite trend in percentage representation occurs in stage E (estimated 27-39 months) with an increase from Yahya VII through VI to V and then a decrease in IVC to almost the VII level. This shift from earlier to later kill-off through time with a reversion in Yahya IVC to the earlier pattern is clearly represented in the curves of Figures 5.24a and 5.25a.

Looking at the patterns period by period, for Yahya VII as a whole (219 specimens), the percentages of the total fragments allocated to stages C, D, E, F, and G are fairly even, ranging between about 14 and 20 percent and peaking in stage F. This produces a relatively straight "survivorship curve" that falls less precipitously than that for R37 with about 50 percent of the specimens being from animals older than stage E. Examination of variation within Yahya VII, however, reveals a less simple picture. If the corpus of mandibles and lower cheekteeth is divided into material from early (E-C), middle (B) and late (A) period VII, there appears little consistent variation through time (Table 5.30 and Figure 5.25b: left set of curves). Thus for VIIE-C (35 specimens) the distribution of specimens through stages C-H is relatively even, ranging between about 12 and 18 percent and with only a minor peak in stage F. This contrasts with the distribution for VIIA (43 specimens), which is distinctly uneven, peaking very markedly in stage F. The distribution for VIIB (121 specimens) falls between those for the other two temporal units in evenness of distribution with a range through stages C-G of from about 13 to about 21 percent and with the peak in

stage C. Overall, the curve for Yahya VIIB is reasonably similar to that for R37, the curve for VIIE-C is remarkably like that for Yahya VIB(!), and the curve for VIIA is unlike that for any other temporal unit (Figure 5.25b). Finally there are 20 specimens from mixed VIIB/A contexts (no curve drawn; see Table 5.30) with a distribution closest to that of period V(!).

For Yahya VI overall (166 specimens), there is a rise in percentages from stage A to E (22.7 percent) followed by a gradual decline thereafter. The major jump is the one from stage C (7.3 percent), to stage D (19.5 percent). The pattern for VIA (72 specimens) is merely an exaggeration of the overall pattern with the jump from stage C to D being even steeper (1.2 to 24.2 percent) and the peak in stage E being even greater (31.4 percent). As noted in the previous paragraph, the curve for VIB (94 specimens) is very like that for VIIE-C with an even distribution of specimens between stages C and H (c. 12 to 18 percent) with the peak being in stage G (17.7 percent). Perhaps one can view the VIB curve as more akin to the R37 and VII curves and the VIA curve more similar to that of Yahya V. That the beginnings of a change from earlier to later kill-off should be identifiable in the context of Yahya VI is remarkable given the generally non-occupational nature of many of the deposits from that period (see Chapter 7). It does concur with the observations made for the epiphyseal union patterns, however.

As already noted for Yahya V, the percentage of allocations in phases A-D is low (12.7 percent of the total of 78 specimens) in contrast to that in phases E-G (69.8 percent of the total). This

pattern is in distinct contrast to that for Yahya IVC overall where stages A-D have a relatively high percentage of the allocations (39.8 percent of 102 pieces) and stages E-G a proportionately lower percentage (44.9 percent). The earlier kill-off is represented even in the subdivided IVC assemblages (IVC.2: 63 specimens and IVC.1: 39 specimens) although the distribution of allocations is more even in IVC.2 than it is in IVC.1. The fact that many of the IVC.2 deposits were screened might suggest that the high proportion of teeth and jaws from young animals (44.1 percent of the allocations for stages A-D) are a reflection of recovery technique. If so, this would cast considerable doubt on the patterns for the other periods. What also has to be taken into consideration, however, is the marked non-congruence of the epiphyseal union and mandibular eruption/wear data for Yahya IVC.

Rough comparisons of an epiphyseal union and a tooth eruption/wear "survivorship curve" can be made by overlaying one on the other (they are drawn to the same scale). There are four posible comparisons: 1) Figure 5.22 or 5.23 "a" or "c" (younger age estimate for epiphyseal union) to Figure 5.24a (older age estimate for tooth eruption/wear) 2) same to Figure 5.25a (younger estimate), 3) Figure 5.22 or 5.23 "b" or "d" (older estimate) to Figure 5.24a (older estimate), 4) same to Figure 5.25a (younger estimate). These comparisons must be done with all due respect for the nature of the data and with the realization that, strictly speaking, what is being compared is the <u>differences between</u> stages in fusion scores and the <u>percentages within</u> stages of tooth eruption/wear. In all cases we are dealing with gross averages that can be severely distorted by accidents of deposition and preservation. Thus

only general trends and not specific variations are of relevance.

For Tepe Gaz Tavila-R37, the best fit is comparison 2 (young to young) followed by comparison 3 (old to old). The fit here is remarkably good with the curves reaching 50 percent "survivorship" within the range of 20 to 30 (or 36) months and 20 percent "survivorship" within the range of 36 to 42 months (perhaps extending to 60 months on the basis of the tooth eruption/wear data).

For Tepe Yahya period VII the fit is not so good. Depending upon the portion of the curve examined, the best matches occur with comparison 2 (young on young) and comparison 4 (old to young). In fact, a much better match would be between the epiphyseal union data for Yahya VII as a whole and the tooth eruption/wear data from period VIIB alone (note relationship of the R37 and VIIB curves in Figure 5.25b: left graph in comparison with Figure 5.22a or 5.22b). On this basis one would eliminate consideration of the VIIE-C and VIIA data and note that the 50 percent "survivorship" point is reached at about the same time or perhaps even earlier in VIIB than in R37. With such a comparison, there is no real levelling-off after the half-way point is reached, as the VIIB eruption/wear curve continues to closely hug that of R37. Such an interpretation would confirm the underrepresentation of unfused distal femora and proximal tibiae in Yahya VII. It would also be in accordance with the approximately contemporary nature of R37 and part of Yahya VII. Furthermore, it is possible to begin to define a trend in VIIA toward a practice of later kill-off. Under these interpretations, however, it is necessary to discard the VIIE-C curve as aberrant unless one wishes to agrue that it is a true representation of of a relatively

even kill-off through almost all age groups that subsequently changed to one focused first toward younger and then toward older age groups.

With Yahya VI, there is no really good fit between curves, the least satisfactory being comparison 4 (old to young). There are fits that occur with comparison 2 (young on young) if one discards fusion stages IV, VI, and VII; comparison 3 (old on old) if one discards fusion stages VI and VII and splits the difference between III and IV; and comparison 1 (young to old) if one discards fusion stages III and V. As far as sample size is concerned, the most appropriate scenario to choose is the last since fusion stages III and V are based on the smallest numbers of specimens (13 and 9 respectively). This would mean, however, that unfused specimens are overrepresented in these groups, a phenomenon that seems less likely than underrepresentation given the nature of the deposits and the recovery techniques uses. Overall, the major difference between the VII and VI curves occurs in the early stages with fewer very young animals being killed off (stages I and II for fusion, stages A and B for eruption/wear) in Yahya VI. The differences between the eruption/wear profiles for VIB (the earlier temporal unit) and VIA have already been noted, the trend toward less early kill-off being that much more marked in A than in B.

For Yahya V, the best agreements occur with comparison 2 (young to young) and comparison 4 (old to young). For the former, fusion stages V, VII, and to some extent II are problematical and for the latter, fusion stage VII and, to some extent, II-IV do not agree with the eruption/wear data. Overall, however, it is clear that "survivorship" is high for the younger age groups in period V and, to judge from the

eruption/wear data, kill-off is concentrated late (stages E-H: beginning in the third year).

With Yahya IVC, there is the least agreement between the fusion and eruption/wear curves. The only possible matches are comparison 1 (young to old) and comparison 3 (old to old). For both it is necessary to eliminate fusion stages III, IV, and VII to obtain something of a fit. In all cases, unfused specimens would have to be considered underrepresented. Since the IVC assemblages were recovered by screening in a high proportion of the cases (particularly in IVC.2), this would indicate differential destruction of bones from young animals. Another possibility, of course, is that the jaw fragments of younger animals are overrepresented or those of older animals underrepresented in the IVC collection. The mechanism for this would probably need be cultural.

An important question at this point is whether we should rely on the epiphyseal union or the tooth eruption/wear data for the best picture of kill-off? Both sets of data agree well for R37, but agreement progressively worsens from Yahya VII through IVC. Considering the problems of interpretation noted by Watson (1978; see above) and the taphonomic factors that have obviously affected these assemblages, it appears as if patterns based on tooth eruption and wear might be somewhat more reliable than those based on epiphyseal union. One must be aware, however, that depending on a single skeletal part to provide kill-off data has its own risks. As is noted in Chapter 7, cattle mandibles were used as tools, a phenomenon also documented for caprine mandibles by Gilbert (1979: 180-198) at Godin Tepe (although not present to any degree in these caprine collections from R37 and Yahya). Such

use would involve the saving of mandibles with those from adult animals, for example, deemed somewhat more useful than those from young animals. Furthermore, we have already seen that information on ageing derived from mandibles need be no more consistent than that from epiphyseal union. This is a basic problem with all zooarchaeological data where, in order to obtain large enough samples for statistical manipulation, it is necessary to combine the remains of a multitude of different consumption and disposal "events" and glean average patterns from a potentially highly variable set of data.

Returning to the models of caprine kill-off proposed by Payne, Redding, and Zeder (see Section 5.5.1), there was common agreement that optimization for meat and for herd security would involve killing off most male animals before the age of 30 months. Redding made more specific suggestions, namely that optimization for meat would lead to most males being slaughtered in the 21-27 month range, while optimization for herd security would lead to two kill-off peaks, these being 9-12 and 15-24 months under good environmental conditions. To be more specific, Redding (1981: 306) provides the following percentages for a mixed flock (60 sheep, 40 goats) and the goal of maximizing herd security: 0-6 months - 9.6 percent; 6-12 months - 25.9 percent; 12-24 months - 26.5 months; 24-36 months - 13.0 percent; 36-48 months - 1.1 percent; etc. For energy offtake maximization (Redding 1981: 302), there are changes only in the age ranges of 6-12 months (to 12.8 percent), 12-24 months (to 30.0 percent), and 24-36 months (22.6 percent). With more heavily goat dominated herds, Redding (1981: 301-302) would expect kill-off to be even earlier. In all instances, however, one would

expect the 50 percent survivorship level to be reached in the 12-24 month age range. This level is significant because it should represent the kill-off of most males and of selected young females.

Correlating our stages with Redding's, stages A and B (tooth eruption/wear) approximate his 0-6 month range, stage C his 6-12 month, stage D his 12-24 month range, and stage E his 24-36 month range. As for epiphyseal union, the difference between the fusion score of stage I and a score of 100 should approximate Redding's 0-6 month range, between the scores of stages I and III his 6-12 month range, between III and V his 12-24 month range, and between IV and VI his 24-36 month range. In addition, a herd security strategy would appear to dictate that about 50 percent of the jaws come from animals stage D or younger or that a fusion score of 50 be attained by stage IV or V. A more purely meat strategy might push kill-off a bit later, although the 50 percent mark would still be attained in stage D or stage V.

Evaluating the fit of the Yahya/R37 data with these criteria reveals that, as far as epiphyseal union is concerned, the fusion score of 50 is reached by stage IV or V only for R37 and Yahya VII and IVC.1. It is never reached in Yahya VI, V, or IVC.2, a fact that is revealing of the problems of interpreting the later stages using this technique. Significant kill-off does occur between stages I and III and between stages III and V in R37 and Yahya VII and VI, but only between stages III and V for the remainder of the assemblages. One might therefore interpret these patterns as indicating a shift from a more herd security oriented kill-off to a more purely meat orientation by Yahya period V. Even so, kill-off is not as high as Redding would have predicted for the

early stages. This might be attributable to an underrepresentation of unfused specimens but it is confirmed as well by the tooth eruption and wear patterns.

As for the mandibular data, the 50 percent mark is met in stage E (27-39 months estimated from Anatolian goats) in all cases except Yahya VIIA, VIIB-A, VIB, and most notably V where it is met in stage F (39-60 months). When the overall figures for the various periods are examined, the mark is met outside of stage E only in the case of Yahya V. All this suggests a considerably later kill-off than might have been predicted by Redding for either herd security or meat although it should be noted that the 50 percent mark is almost reached in stage D in R37 and Yahya VIIB and IVC.2. As far as kill-off in stages C and D is concerned, these stages provide under 25 percent of the specimens only in Yahya VIIA, VIIB-A, and, again most notably, Yahya V where the total is under 10 percent. For stage C alone, however, Yahya VIA and VI-Total also have very low percentage contributions, being under 8 percent. Thus a shift toward the older pattern characteristic of V is clearly evident for Yahya VI. Here again, we might interpret the shift as one more toward a meat orientation, although kill-off in the later age stages is much higher and in the earlier stages much lower in most instances than would be expected from Redding's model. A further difficulty, of course, is that there is no agreement between the fusion score and tooth eruption/wear data for Yahya IVC.

The question that arises here is whether the age estimates for tooth eruption/wear are accurate for the Yahya/R37 material. If they are and if the distribution of specimens among the various stages is

deemed reliable, then one can argue that the data do not fit Redding's model and that factors other than those identified by him are operating in these cases. Without an independent calibration of the tooth data, however, it is pointless to speculate. Such a calibration might be possible by analysis of incremental structures (growth rings) in the dentine and cementum of selected specimens (see Stallibrass 1982 and Gordon 1984 for a recent review and bibliography, respectively).

Zeder (1985) has suggested that significant clusterings of specimens in certain age ranges might be expected under conditions where meat is brought to a settlement by provisioners from outside sources. In contrast, direct relations with husbandrymen would provide the opportunity for a wider range of ages to be represented. Both Tepe Gaz Tavila-R37 and Tepe Yahya were agricultural settlements although period IVC at Yahya does represent a more monumental and perhaps even alien presence in the Soghun valley. Viewing Zeder's argument in a looking glass, one might expect that certain age classes would be underrepresented in the debris of pastoralists who supplied animals to provisioners. Could such an export of animals be represented by the Yahya V assemblages as reflected in the tooth eruption/wear data? A definitive answer to this question cannot be made on the basis of the available evidence. Certainly, however, the eruption and wear data do not suggest any particular clustering for Yahya IVC which is where one might most expect to find provisioning from outside sources.

5.5.4. CONCLUSION

To some extent, the analysis of bovid demographic data has been an

exercise in frustration. Tantalizing clues but no clear picture has emerged. That this is true can be attributed to the nature of zooarchaeological data affected as it is by biological forces acting on the living animal and taphonomic forces acting on its bones. The cultural practices with which we are principally concerned thus become obscured.

In spite of all difficulties, there are some general trends that can be discerned. These are particularly consistent for cattle, perhaps because the bones of cattle are less affected by taphonomic forces, but also because the small size of the cattle assemblages makes it difficult to partition them to check for variation. Even so, there is a certain non-congruence between the epiphyseal union and tooth eruption/wear curves for Yahya V-IVC, the latter curve indicating little difference with VI while the former suggests even later kill-off than in VI. The principal change in cattle exploitation, however, seems to have occurred toward the end of Yahya VII. Information from sex ratios based on the pelvis and from measurement data suggest that older males may be better represented in Yahya VI, V, and IVC than in VII. There is an accompanying shift in the age curves toward a later kill-off. These trends might be equated with the increasing use of either males or castrates for draft purposes. There is, however, no real evidence for castration being practiced.

With caprines, the picture is less clear. This is certainly due at least in part to taphonomic factors, although the available data may be that much more intractable because of the absence of an identification of many caprine bones to the genus level. Should there have been

markedly different husbandry practices for the two taxa, then what may have been clear patterns for each would tend to become obscured. Given the marked domination of identified goat bones over those from sheep, one can expect that what patterns are discerned are heavily goat oriented.

There are a number of contradictory trends in the caprine demographic data. Some of the more intriguing are differences between patterns for R37 and Yahya VII, occupations that appear, at least in part, to have been contemporary. Thus, pelvic and horncore remains identified as male are relatively more frequent at R37 than in Yahya VII. An opposite pattern is suggested by the the measurement data with the goat bones from R37 tending to be smaller overall than those from Yahya VII. "Survivorship curves" for the two assemblages are also somewhat different with that for R37 being more precipitous indicating that, on the whole, fewer animals were allowed to get old and more animals were killed off somewhat younger. Comparison of the R37 eruption and wear data with that from Yahya VIIB alone (as opposed to VII taken as a whole), however, shows less difference in kill-off.

At Yahya, the ratio of males to females as determined from pelves becomes more even through time from period VII to IVC with the greatest difference being between Yahya VII and the remainder of the temporal units. This difference is paralleled by a less marked one in goat sex ratios as determined from horncores. As for kill-off patterns, there is a distinct trend through time toward later kill-off starting in period VI with general agreement between the tooth eruption/wear data and that from epiphseal union for all except period IVC where two quite different

patterns are evident. Kill-off in period V is remarkably late to judge particularly from tooth eruption and wear. Kill-off in IVC is similar to that in V if one looks at the fusion data and similar to that from VII if one considers the tooth data. This discrepancy is not easily explained especially as recovery procedures used when excavating IVC contexts were among the most thorough of any employed at the site. It could be, however, that the IVC assemblage is the most thoroughly dog-ravaged. This would lead to greatest destruction of bones from younger animals but would tend to affect mandibles less than post-cranial specimens. This possiblity is examined from different points of view in Chapters 7 and 8.

Chapter 6

PROCEDURES OF CONTEXTUAL ANALYSIS

6.1. INTRODUCTION

Only through an understanding of site formation and faunal depositional processes is it possible to evaluate the faunal record of a site. This proposition, now widely accepted, forms one basis for "taphonomy" which, broadly speaking, is the study of the transition of faunal material from the biosphere into the lithosphere (e.g., Gifford 1981 for a review). On a more general level, however, R.H. Dyson, Jr. some time ago recognized that the "understanding of the mechanical dynamics by which given deposits have been formed is an important step in reconstructing the history of human activity in the area" (Dyson 1966: 260). In light of these considerations, Chapter 7 is concerned with placing the faunal remains from Tepe Yahya, south side, periods VII-IVC and Tepe Gaz Tavila-R37 into their archaeological context.

When discussing contexts, however, it is important to realize that excavated material in general and the faunal segment in particular are

as much creations of the archaeologist as they are static reflections of past activities. In most instances, units isolated during excavation differ significantly from those which can be defined in the abstract on the basis of the logic consideration of disposal activities and depositional processes. Thus, it is necessary to be aware of the realities of excavating a Middle Eastern site and to determine the degree of congruence likely between the stratigraphic and excavation units.

Behind any contextual analysis is the hypothesis that species and skeletal part compositions of a faunal assemblage vary according to the natures of the depositional contexts from which they are recovered. Support for th s proposition comes from sites as divergent as Neolithic Hajji Firuz Tepe (northwestern Iran: Meadow 1978a) and medieval Exeter (England: Maltby 1979). Faunal profiles also vary according to the type of recovery employed (e.g., Payne 1972). Chapters 8 is concerned with evaluating the factors of context and recovery that are described in Chapter 7.

The present chapter (Chapter 6) provides a necessary introduction to Chapters 7 and 8. Discussed are processes of mound formation, procedures of excavation, the coding of context information for the present study, the effects of rodent activity, and problems of periodization.

6.2. MOUND FORMATION

Mounds in the Middle East grow through the continuing accumulation of debris derived chiefly from disintigrating buildings and disposal of the

waste products of day-to-day activities. This growth process has long been recognized, but until Dyson's 1966 report on his 1954 sounding at Susa, no systematic attempt was made to relate the dynamics of mound formation to the archaeological record. In that report, Dyson (1966: 260) outlined an "elementary cycle of construction, occupation (primary trash), collapse (secondary trash) and consolidation" which "may be read consecutively from many stratigraphic sections in Near Eastern mounds where additional activities have not complicated the sequence." In 1972, Michael Shiffer published an article in which similar concepts and terminology were elaborated, quite independently, on the basis of a more general consideration of deposition activities and site formation processes (also Shiffer 1976). The following presentation is based principally on the work of Dyson and Shiffer with certain additions that seem warranted on the basis of further consideration of the complexities of mound formation as they related to faunal depositional processes (e.g., Meadow 1975, 1976, 1978a, 1980).

The basic construction cycle can be said to begin with preparation of a building site. This often includes knocking down existing structural remains, leveling the area, and perhaps digging foundation trenches for the new walls. Each of these activities involves the disturbance and redepositing of older material. These acts are here termed "tertiary deposition" and the resulting deposits "tertiary deposits" or "tertiary trash." In addition, during the process of site preparation, contemporary trash may be deposited in order to fill uneven areas or to build up one portion of the site. The act of depositing such debris is here termed "secondary disposal" when the trash is

brought from elsewhere on the site or "primary disposal" when it results from in situ consumption activities. This distinction between primary and secondary depositional acts may be conceptually evident, but the resulting debris is usually not clearly attributable, after the fact, to one or the other process. Thus, it is necessary to label trash deposited in the context of site preparation as "secondary" or "tertiary" unless there is clear evidence that it results directly from primary activities (e.g., an animal or human interment). Furthermore, while the isolation of secondary from tertiary trash is possible in many instances, the painstaking archaeology necessary to effect such differentiation is often not practicable given the realities of the field situation.

Site prepartion having been completed, foundations, walls, roofs, and other architectural features are erected. At a site where buildings are constructed of mud-bricks, one of sources of raw material is earlier deposits on the site itself. As a result, cultural remains that predate the erection of a structure can be included in the very fabric of that building, i.e., in the bricks, mortar, foundations, floor, or roof. During the decay, erosion, and collaple of the stucture, this earlier material can come to overlie trash deposited when the building was in use. Again, while isolation of the tertiary fraction included in wall melt and collapse is sometimes possible with careful excavation, the time necessary to do so is often not able to be committed.

Following construction, a building is occupied or used in some other fashion. Trash begins to accumulate on living surfaces as the result of the day-to-day activities of the inhabitants. Floors inside

structures, however, will often be kept clean of noxious garbage, the primary trash being swept up periodically and dumped as secondary debris into a convenient area, whether adjacent alleyway, street or court, or nearby pit, garden, or abandoned building. As a building gets older, more and more primary trash may be permitted to accumulate until such time as the structure is renovated, falls out of use, or is abandoned.

Renovation of mud-brick buildings usually takes the form of repalcing roof beams, replastering walls, roof, and floors, and sometimes the adding or subdividing of rooms. Such activities provide the means for deposition of additional earlier (tertiary) material as well as for the sealing of primary and secondary deposits beneath newly laid floors. Because of the primary and secondary disposal of trash in streets, alleys, and other exterior locations, these areas tend to rise more rapidly in elevation than do contemporary interior surfaces. In addition, whole areas of a site are usually not abandoned all at once, reconstruction and rebuilding taking place in different places at different times. As a result of the uneven cycle of deposition and construction, contemporary occupation across a site is rarely on the same absolute level. The more appropriate model for stratification is thus that of the spiral rather than that of the layer-cake.

When a building is finally abandoned, it is usally stripped of reusable features such as beams, doors, and window frames and then is either leveled immediately or permitted to erode and collapse on its own. In the latter instance, the abandoned area will often be used for the dumping of garbage and other waste swept up elsewhere on the site. While some of the organic fraction of such secondary trash is likely to

be scavenged by dogs and by rodents, the remainder will eventually be buried by wall melt and collapse (itself containing tertiary trash). The fact that such material is deposited in a sheltered and aggrading environment means that it is more likely to be preserved than had it been dumped in an area exposed to the full force of the sun's rays and to desiccating winds.

In the preceding discussion, the concepts of primary and secondary disposal and tertiary deposition have been introduced as they relate to Middle Eastern mound formation. Primary disposal results in primary refuse which is defined as trash discarded at the locus of its creation. If an area continues to be occupied, it is likely that much of this trash, and especially the larger pieces, will be removed during "house cleaning" activities and deposited elsewhere, whether in a street, abandoned building, or nearby wadi. In other words, it becomes secondary trash resulting from secondary disposal activities. Most of the faunal remains in Middle Eastern sites are likely to be of secondary origin, particularly those from fill deposits in rooms, trash deposits in streets and alleys, and midden deposits. If abandonment of an activity area or occupation area is anticipated, however, refuse may not be removed and thus remain where originally deposited. This phenomenon of primary deposition associated with abandonment is probably the source of a good deal of the material found on or just above the floors of ancient Middle Eastern buildings. Tertiary deposition involves the reuse in construction activities of previously deposited material. A related natural process is that of redeposition by burrowing animals, especially rodents. Tertiary deposits resulting from construction in

mud-brick often cannont be identified and separated from secondary deposits. This can result in an obscuring of what otherwise might be discrete temporal configurations.

Given the above considerations together with the nature of the deposits at Tepe Yahya and Tepe Gaz Tavila-R37, eleven "context types" were established for analysis of the faunal collections. These, used to designate separate rows in the tables of Chapter 7, are:

RUBBLE
WALLS
OCCUPATION IN
OCCUPATION OUT AND ASSOCIATED
OCCUPATION AND FILL IN
OCCUPATION AND FILL OUT AND ASSOCIATED
MIDDEN
ROOM FILL IN AND ASSOCIATED
UNDIFFERENTIATED FILL OUT
PLATFORM OR LEVELING
MIXED OR OTHER.

RUBBLE includes deposits of small cobbles, sherds, bone, and some sediment used as foundation fill particularly in Period VI. Rubble is likely to be tertiary in origin, having been brought in from previously formed dump areas. WALLS include material found in mud-bricks or in clearly defined wall melt. Here again, there is likely to be a high proportion of tertiary trash. OCCUPATION IN refers to material found within or immediately upon the floors of what were probably roofed areas. These are primary or secondary deposits as are those designated as OCCUPATION OUT AND ASSOCIATED which come from probably unroofed contexts. OCCUPATION AND FILL IN and OCCUPATION AND FILL OUT AND ASSOCIATED include secondary deposits of trash dumped in and around decaying mud-brick structures as well as, probably, some primary and tertiary material not identifiable as such (see below). The distinction

between interior and exterior loci was maintained even for what were presumably abandoned areas because smaller enclosed areas are likely to provide better protection for faunal remains than are large open spaces.

MIDDEN deposits are clearly defined heaps of trash, including principally ashes and bone, that were dumped outside of the area of settlement. These can be considered "pure" secondary deposits, and they were identified only in Yahya periods VII-V. ROOM FILL IN AND ASSOCIATED is the upper fill between and around walls but well above floor level. At least some of this material may have been intentionally redeposited by peoples leveling an area for later construction. One thus can expect a high tertiary component as well as secondary deposits. The same can be said for UNDIFFERENTIATED FILL OUT which, however, comes from areas more distant from the remains of structures. PLATFORM OR LEVELING debris is similar to the above two categories but comes from contexts that were identified by the excavators as intentional mud or brick packing. As a category of foundations, it brings us full circle back to RUBBLE. Finally, while much of the material classed as MIXED OR OTHER represents collections that were inadvertently mixed at some stage between excavation and final analysis, some of the bones come from special features that are discussed in Chapter 7 in the context of the period or phase concerned.

6.3. DETERMINING STRATIGRAPHIC RELATIONSHIPS

The process of excavation at Tepe Yahya has been described by Lamberg-Karlovksy (1986). Every attempt was made to excavate within

natural stratigraphic units. The general approach used was to dig in a fashion consistent with the type of deposit being exposed. Thus, unsealed surface material and undifferentiated fill were removed as rapidly as possible using large tools (pickaxe and shovel). Where walls or other features were encountered, digging was carried out more carefully using small picks and trowels. Floor deposits were usually sectioned and stripped layer by layer with trowel and brush while the upper fill of rooms was removed as expeditiously as possible using larger tools. The basic dictates of the so-called "Wheeler-Kenyon" technique were followed in that 10-by-10 meter areas were never cleared all at once and standing sections were left at frequent intervals (Kenyon 1957: 77 and Wheeler 1954). In addition, every effort was made to dig test trenches at right angles to major wall faces down to the construction surface before clearing a room or other feature. As for Tepe Gaz Tavila-R37, the area cleared was much smaller than any at Yahya (maximum: 3 by 4.5 m) with the result that work could proceed at a somewhat slower pace although the same basic techniques were used.

In a mound as depositionally complex as Tepe Yahya proved to be, it was unusually difficult to be uniform in the application of any logically consistent approach. Great variation in architectural scale and construction techniques together with the generally poor preservation of floors and walls made the daily task of excavation challenging but also frustrating. Detailed understanding of the construction and life of most individual complexes came only after each had been excavated and dismantled. Uning information revealed by the major and subordinate sections, by the overall building plan, and by the

dismantling operations themselves, it has usually been possible to reconstruct details of constructional history. It has not always been possible, however, to relate material excavated as a unit unequivocally to one or another depositional event. In other words, excavation units often do not correspond to depositional units. The reasons for this fact are many, the principal among them being the practical difficulties of identifying during excavation what later are seen from section and plan to be significant depositional events. At Yahya, problems of excavation unit characterization are complicated by variation in the kind and size of units isolated, in the methods used to excavate the units, and in the nature of the information recorded. Such uneveness is due chiefly to differing abilities, experience, personalities, and interests of the individual site supervisors. At R37, given the small area excavated and the fact that a single individual oversaw the operation from start to finish, problems of characterization are not so acute.

One of the most effective ways found to work out the relations between excavation units and deposition history has been a modified version of what has been termed the "Harris matrix" after its developer E.C. Harris (1975, 1979). Briefly stated, in a true Harris matrix, each definable depositional unit is related in time to each other unit regardless of unit nature or size by linking up on paper a series of symbols each of which serves to represent a single unit. Thus, if one has a foundation trench, a wall, and an occupation surface, symbols for the three will be displayed one above the other linked by vertical lines. If a second wall to the same room is defined, a symbol

representing it will be placed at the same level on the paper as the first and joined to it by a horizontal line. Obviously such a diagram can become complex. Furthermore, as already stated, excavation units may be quite other than depositional units. In view of this last, the diagram has to accomodate non-discrete archaeological entities as well as depositional features. What results is a "modified Harris matrix" which serves to show how excavation units relate to each other and to depositional events.

Modified Harris matrices were constructed by T.W. Beale for Yahya periods VII, VI, and V (reflected in Beale 1978 and 1986) and by me for Yahya period IVC and Gaz Tavila-R37. These were based on available field notes, plans, sections, and discussions with the site supervisors. They proved indispensible to sorting out the hundreds of excavation units defined for those periods.

6.4. RECORDING ATTRIBUTES OF CONTEXT

Following preparation of the modified Harris matrices, each excavation unit <u>with faunal materials</u> was provided with a line of numerical code specifying various attributes of context and excavation. Those attributes coded include: field designation, context description, fill description, context quality, recovery type, stratigraphy, periodization, site characterization, approximate date, and comments. The code employed is that described in Meadow (1978) and included here in Appendix 1. In Appendix 3 there are three listings of the excavation units. The first is arrayed according to key number ("LOC"), the second by assigned period ("PERIOD"), and the third by field designation. From

the data included in these listings, excavation units were grouped by context type (see Section 6.2) and by temporal unit as the first step toward tabulating the data arrayed in the tables of Chapters 7 and 8. The discussion of the various coding categories that follows is meant to explicate aspects of the coding protocol in Appendix 1.

Locus. Each bag of bones, when it arrived on the analyst's desk, was rather arbitrarily assigned a four-digit number (0001-9999). This number, when combined with two additional digits indicating site (Yahya = 11, Gaz Tavila-R37 = 12), provides a six-digit key which is common to each of the four different coding formats (post-cranial, cranial, measurement, context) and thus can be used for purposes of cross reference. On occasion, there may have been a number of bone bags from the same excavation unit. Under such circumstances, each bag was given a separate number and the locus code for one bag recorded as a separate attribute (SAM or SAME) for that bag and for each other bag of the group.

Field designation. At Yahya and R37, each excavation unit was designated by area (A, BW, C/DE, etc.: see Figure 2.2), test trench (if any), stratum, and feature. In many instances, test trench, strata, and feature numbers were begun anew each season. The year of excavation is thus of particular importance and was recorded along with the other field designations for each excavation unit yielding bones (SQR, YR, TT, STR, FEA). In addition, the actual month and day of excavation, if determinable from the field notes or bone bag tags, was entered at the end of each code line in the comments field.

Context description. Each definable excavation unit (or locus) was coded as accurately as possible to reflect the kind of context it was determined to be. In some instances the field notes were not as clear as they might have been on this topic and it was necessary to code a "best guess." In other instances, excavation units clearly were not discrete; these were coded as "mixed fill," "undif(ferentiated) fill," or according to the dominant component of the excavation unit. In addition to the category "floor/fill/feature" (FLR/FL/FTR), each unit was coded as to whether it came from an interior or exterior locus (IN/X) and as to the nature of that locus (interior context - ICX, exterior locus - ECX). This information, when considered together with the nature of sediment in the deposit (fill description - FIL), permits classification of the contexts along the lines discussed above (primary, secondary, and tertiary fill deposits from interior and exterior loci). For example, room fill deposits with a high wall-melt content are most likely to contain tertiary material, while those from the soft fill of a midden area are almost certainly secondary in origin.

Fill description. The nature of the principal component of the soil was recorded for each unit. As with floor/fill/feature, however, it was often not possible to characterize precisely the nature of the excavated fill either because this information was not recorded or because the unit contained a number of different fill types. Under such circumstances, the unit was characterized as "fill not determinable" ("??"), "mixed deposits" ("mixed"), or according to the major component of dominant texture ("hard," "soft," etc.). Context quality. A subjective assessment of the quality of each excavation unit was made on

the basis of information contained in the field notes. From the number of "good" (G) and "fair" (F) designations appearing in the lists of Appendix 3, it is clear that many excavation units are not discrete and/or not well-defined. This reality has been stressed repeatedly in the forgoing discussion where it was noted that because of the complex nature of Middle Eastern mounds, units defined during excavation often do not correspond to actual units of deposition identified after the fact through study of sections, plans, and field notes. The quality of information from many contexts is thus of a lesser order than that provided by material from discrete and well-defined units found to correspond to a single depositional event or to a series of closely related ones ("excellent" - E). At the other end of the scale is material from unsealed ("poor" - P) and surface (S) units. The latter have been excluded from this analysis, while material from the former can be used only with circumspection.

Recovery type. As noted in Chapter 2, most material from Tepe Yahya was retrieved by workmen in the course of excavation or as they sorted through loosened sediment. Overall, therefore, recovery tended to be somewhat uneven with more complete retrieval occurring where excavations were proceeding more carefully and slowly. Thus, sediment removed from floors or surfaces was carefully picked-over (FPK), while that from the upper fill of rooms or undifferentiated fill was only roughly sorted through (RPK). In many instances, however, it was not possible to ascertain from the field notes the degree of care employed in excavation or recovery. Thus many units are coded merely as "picked(-over)" (PK). During the 1975 season, dry screening through 6

mm mesh was carried out systematically on almost all Yahya IVC units after they had first been picked-over by workmen. The resulting statistics on differential recovery are noted in Chapters 7 and 8. Also in 1975, some 78 sediment samples from all periods were water-sieved through 1 and 2 mm mesh screens (Tosi 1976). A few other samples were water-sieved in 1973. A good deal of rodent material was recovered, but generally very few articular ends or even small skeletal parts of medium mammals were found.

Stratigraphy. This section of the code is divided into four parts: SAME, CTMN, EARL, and LATE. Each part can accomodate a four-digit locus number. Use of the SAME column was note above (under "Locus"). Coding of the other three parts is based on information provided by the Harris matricies. An entry in the CTMN column is that of a more or less precisely contemporary unit that yielded faunal remains. Entries in the EARL and LATE columns are earlier or later units in the same phase and withing the same area of excavation. The purpose of these codings is to permit a more informed grouping of the units for summary statistics.

Periodization. Assignment of individual units to temporal unit is based principally on the work of Beale (1978, 1986), Potts (1980), Prickett (1986a: Appendix I), and my own analysis of the field notes. In a number of instances, it was not possible to assign an excavation unit to a single period, with the result that an inclusive range is given. Problems of periodization are discussed below in Section 6.6.

Site characterization. This column is used to indicate the general nature of the site in the area from which an individual unit was

excavated. Variation in the nature of faunal remains from different functional areas of a site can be expected.

Date. The approximate date of the unit in years BC is given in this column.

Comments. These are short notes concerning the unit and are generally self-explanatory. Where Beale (1978, 1986) and Potts (1980) have numbered rooms and areas differently from the way they were labeled during excavation, the new designations are listed.

6.5. RODENT ACTIVITY

A major complication of excavating at Tepe Yahya was the presence of rodent burrows honeycombing much of the mound. From three meters below the earliest occupation to the top of the site, the telltale signs of rodent activity were encountered in the form of elongated cavities filled with pellets of earth, small sherds, artifacts, pieces of bone, and sometimes even the skeletons of the rodents themselves. The effects of this burrowing can be seen in almost any photograph of the excavations (e.g., photographs in Beale 1986).

From initial examination of the many rodent mandibles, maxillaries, and teeth recovered by screening and water sieving in 1973 and 1975, the principal culprits apparently were Indian gerbils (Tatera indica). These good-sized rodents excavate large burrow systems (sometimes more than 1.5 m deep) often near and even within agricultural villages (Lay 1967, Harrison 1972). Roberts (1977: 287) that, in Pakistan, the Indian gerbil "has also been found burrowing in the mud walls of occupied houses." Tepe Yahya especially seems to have been infested with rodents

such as these, further evidence being that a rather high proportion of animal bones bear sets of the twinned grooves so characteristic of rodent gnawing activity (see Chapters 7 and 8). Under these circumstances, vertical transport in both directions of smaller artifacts and pieces of bone as well as of soil and organic matter can be expected to have occurred. Material from deeper levels brought up to the surface and spread around will be inseparable from material of the contemporary occupation. Later material, too, can be dragged or washed down the burrows and, even with the greatest diligence on the part of the excavator, will be almost impossible to identify as intrusive.

There is really no way to effectively correct faunal tabulations for rodent activity. Specimens that bear the tell-tale tooth marks may not have been moved far from the area of original deposition while specimens without any visible marks may have been carried significant distances. Material actually from rodent burrows is clearly suspect, but often this was not separately noted by the excavators. Clearly large fragments are less likely to have been dragged as far as smaller pieces. Thus large mammal bones, even those with chew marks, are likely to be more or less where they were deposited while small specimens, and expecially the articular ends apparently favored by rodents (to judge by the location of chew marks) are more likely to have been moved. In sum, particularly at Tepe Yahya, one has to be aware of the possibility of a significant degree of temporal homogenization, particularly in the case of smaller specimens, through rodent activity. At Tepe Gaz Tavila-R37, where relatively few bones show signs of rodent gnawing, the problems is probably less acute.

6.6. PERIODIZATION

The definition and labeling of temporal divisions is generally accepted as a useful hueristic device in archaeology. Such labeling, however, does bring with it the the inevitable use of the established divisions as undifferentiated contrastive units when, in fact, such a practice almost certainly obscures important variation and change within units across both time and space. This is a particularly serious problem in faunal analysis given that only uncommonly are assemblages from individual excavation or depositional units large enough to permit them to be used without being grouped with others. Thus grouping by period, sub-period, or phase is sometimes necessary in spite of the amount of variation obscured by so doing.

A further problem with periodization (definition and labeling of temporal units) occurs in situations where there are no well-defined stratigaphic gaps (unconformities) in the deposits. In such cases it can be difficult to know where to draw the line. For instance, one dictum of archaeology is that surfaces or floors seal that which is below from that which is above. Everything below is earlier (discounting rodent and other activity) although material above need not all be later (due to redeposition of older material). This "law of stratigraphy" is clearly valid, yet it follows from the previous discussion of mound formation processes that secondary trash in the foundation fill of a building may, in fact, be closer in time to primary and secondary trash on the floor of that building than to secondary and tertiary trash deposited later in the ruins of the same structure. A case in point is

Yahya VC.

At Tepe Yahya, "each new period on the site (designated with a Roman numeral) is marked by the introduction of a major new ceramic type..." (Beale 1986b: 12). Sub-periods (upper case letter) and phases (arabic number) are defined on the basis of architecural changes. Yahya period V is set off from period VI by the introduction of distinctive black-on-red and "Lapui" ware ceramics. Yet, it is clear from published descriptions (Beale 1986: 143-146) and the field notes that the occupation floors of Yahya VC were remarkably clean of debris. This condition leads one to suspect that the few black-on-buff and Lapui sherds recovered were found in the fill of the rooms and therefore can date later than the construction and occupation of the complex. Such a supposition is supported by the nature of the fill of the rooms, Beale (1986: 142) noting that the "upper walls (of the complex) were knocked down soon after the rooms were vacated and the rooms then filled in with the resulting brick debris to create a solid, level base on which to build the VB architecture." Thus, activities associated with the destruction of the VC architectural complex seem directly related to the construction of the VB complex. In a similar fashion, the rubble deposits that served as foundations for the floors of the VC complex, placed by Beale in period VI, are directly related to the construction of those buildings. Indeed, this foundation rubble along with the VC architecture itself is much more akin to that found in Yahya VIA than to that of VB. Thus, while the contents of the fill of the VC complex may include new kinds of ceramic, these contents do not really form a good basis for including the construction and occupation of the VC complex in

a new or separate period. In other words, it is important to conceptually distinguish the secondary and tertiary fill of a complex from the primary and secondary trash deposits that were more or less contemporary with its occupation. An attempt to do this is made in the descriptions of Chapter 7.

A final note at this point is in order concerning terminology. Although Yahya VIIC.1, by the definitions noted in the previous paragraph, should be called a "phase", the phrase "period VIIC.1" often occurs in the literature. The same is true of what should be "sub-period VC" being called "period VC". In fact, in most instances, the term "period" should be read as "temporal division" and the nature of the designation taken to indicate the level of that division (e.g., period VII, sub-period VIIA, or phase VIIA.1).

Chapter 7

THE FAUNAL MATERIAL IN CONTEXT

7.1. INTRODUCTION

The basis for this chapter is a series of tables summarizing information on the distribution of mammalian fauna (Tables 7.1, 7.4, 7.7, 7.10), the relative proportions of different taxa (Tables 7.2, 7.5, 7.8, 7.11), and the frequency of bone modification (Tables 7.3, 7.6, 7.9, 7.12). The quantities displayed in these tables have been compiled from computer listings that present the raw data coded according to the protocols noted in Chapter 3. If those coded data are first level abstractions from the actual bones themselves, then the tables must be considered as second level abstractions. As such, a great deal of variation in the recorded data has been consciously suppressed in a search for patterned variation among different kinds of contexts and different chronological units. Some of the decisions made in compiling these tables were explained in the previous chapter and other are explained below. Placement of excavation units into contextual and chronological

categories can involve some rather arbitrary decisions. These are alluded to as the data is discussed, period by period. Revealed patterns of variation through time and space - what might be considered a third level of abstraction - are elaborated in Chapter 8.

7.2. NOTES ON THE TABLES

7.2.1. Common Features

Each of the master tables (for sake of brevity called the "count/weight," the "species," and the "modification" tables) contains 228 cells (19 columns by 12 rows). Columns reflect individual chronological units, groups of units (summary columns), or, for period IVC, units combined with attributes of recovery and/or context. These units were defined on the basis of the Harris matrices discussed in Chapter 6 and form the framework (a traditional one) for much of the discussion below. Rows, with the exception of the last which contains totals for each chronological unit, reflect context type. The row definitions are the same for each of the twelve tables and were discussed in Chapter 6 (Section 6.3.).

In addition to the 228-cell master tables, summary tables including either row totals or column totals have also been produced (Tables 7.13-7.56). This was done for ease of reference during the discussion in Chapter 8. Note that the column total summary tables (7.13-7.28) do not include the contents of column 19 of the master tables; those can be found on the row summary tables. Row summary tables (7.29-7.56) often do not reflect the total of all cells in a row of a particular master table. Instead they summarize all cells of, for example, a particular

period.

A last common feature of the count/weight, species, and modification tables is that each cell contains twelve items arranged in a four row by three column configuration. How these items differ between the three types of tables is discussed in the next three sub-sections.

7.2.2. The Count/Weight Tables

The first column of a count/weight table cell is made up of specimen counts, the second column of specimen weights (in grams), and the third column of average weight per specimen (i.e., column 2 divided by column 1). The first row is the total of the next three rows (or, in the case of the third column, overall average weight), the second row contains the quantities for medium mammal remains, the third row for large mammal remains, and the fourth row for all other mammal remains not identifiable as coming from large or medium mammal.

The value of the count/weight tables is three-fold. First they provide, in summary form, a good idea of the distribution through time and space of **all** of the mammal bone from the site, identified to skeletal part or not. Second, the bone weights provide a direct and useful, although admittedly imprecise, idea of the relative contribution to the human diet of the different animal size-classes. Third, the average weight per specimen is a potentially useful index of fragmentation. Some discussion and qualification of these statements are required.

The interpretive value of bone distributions would be markedly greater if we were able to determine the quantity of deposit for each excavation unit and thus able to directly compare amounts of bone per cubic meter of sediment. Given the way that most Middle Eastern tell sites have to be excavated, however, this is generally not possible, and Tepe Yahya and Tepe Gaz Tavila-R37 are no exception. We are thus left with the rather impressionistic estimates that are presented in the discussion in Sections 7.4 and 7.5. Another use of the bone counts presented here is as a general check on proportions of sheep/goat to cattle in the species tables. If, for example, the proportion of Bos in a cell of a species table is much higher than that of large mammal in the same cell of the corresponding count/weight table (or vice versa), then some further examination of the situation would probably prove productive.

As far as bone weights are concerned, there has been considerable discussion in the specialist literature of their value, or lack thereof, as estimators of meat yield and biomass (e.g., Uerpmann 1973, Casteel 1978, Wing and Brown 1979, Grayson 1984). My own opinion is that, whatever the actual relationship between bone weight and carcass weight (however defined) may be in any given animal, bone weights give at least as useful an idea of the **relative** meat contribution of different mammalian size classes as do other more indirect methods of calculation. No technique is without inherent error, but one that uses the complete corpus of material and does not involve multiplying one estimate by another (and thereby multiplying errors) seems particularly well suited for our purposes. No attempt is made here to calculate

biomass. Instead, I want to document trends of change. Looking at the situation in a relative way, unit by unit or phase by phase, also helps mitigate the problem of post-depositional changes in specific gravity of bone though processes of mineralization or leaching.

Post-depositional change in bone weight is a major limitation of using average bone weight as an index of fragmentation. Another even more serious limitation is differences in recovery technique. Thus the average bone weight of the unscreened fraction from Yahya IVC is 7.5 grams while the same figure for the unscreened and screened fractions combined is 3.9 g and for the screened fraction alone only 1.4 g. We are thus restricted to looking for clear trends in more or less comparably collected assemblages on a phase by phase or period by period basis. The object of this exercise is to determine if there are any significant changes in fragmentation through time or differences in average fragment size among the various types of contexts defined in Chapter 6 (Section 6.3.).

7.2.3. The Species Tables

The counts listed in the first two columns of each cell of the species tables, with the exception of those for Birds and Reptiles ("Av/Rp" - column 1, row 4 of each cell), are based on a selected set of body parts chosen to maximize the chances of comparability in identification. The "diagnostic zones" (following Watson 1979: 129) used here are the following: the occipital portion of the skull, maxillary with one or more teeth, mandible with one or more teeth, single third deciduous premolar and third molar, and any articular area of the following:

atlas, axis, sacrum, distal scapula, proximal and distal humerus, proximal and distal radius, proximal ulna, acetabulum area of the pelvis, proximal and distal femur, patella, proximal and distal tibia, proximal and distal fibula (including Os malleore), astragalus (talus), calcaneum, proximal and distal metapodials, phalanx 1, phalanx 2, phalanx 3. Since most of the assemblages were not screened and since every attempt was made, within each excavation unit, to match up unfused epiphyses with diaphyses and to find different broken fragments of the same body part, any part of a zone was counted as a whole zone, not the greater than one-half recommended by Watson (1979: 130).

Another feature of the counts that must be mentioned is that they are **not** corrected for specimens found to articulate or for whole bones. Dexter Perkins, Jr. (1973: 367) noted that, in a Middle Eastern mound, "In the absence of archaeological evidence to the contrary, we must ... assume that each fragment came from a different individual." While this is a position that can be defended, the "evidence to the contrary" can be relatively easy to document in some cases and impossible in others. Thus if one imagines a single skeleton butchered, bones smashed for the stew pot, and subsequently dumped on a trash pile, it may be possible to show that the phalanges belong with distal metapodials and the tarsals with the distal tibia, but there will always be a high degree of uncertainty about the "sloppy joints" such as those between the scapula and humerus or between the femur and tibia and about the proximal and distal ends of the same bone if intervening pieces of shaft are missing. Thus, in my species tables what we see are summary counts of selected skeletal parts by taxon. Even if these counts were

corrected for obviously articulating elements and for whole bones, there would be significant changes in only a few cells of the master tables since instances of both phenomena were found to be rare (128 cases out of 3598 zones or 3.6 percent).

Perhaps it is also well to note at this point that the 3598 total of zones tabulated in the species tables are 19.4 percent of the 18,590 total mammal specimens tallied in the count/weight tables. The proportion, in fact, should be somewhat lower since there are a very few complete long bones that have more than one diagnostic zone yet are tabulated in the count/weight tables as one specimen. From this it is obvious that ensuring comparability in identification has significantly reduced that portion of the collection used for determining species composition with the result that fluctuations in the compositions of assemblages (table cells) with smaller numbers of specimens may have little meaning. In these cases, the importance of comparison with the proportions of mammalian size classes tabulated in the count/weight tables is obvious.

Column one of each cell in a species table includes standardized counts for specimens identified as Ovis (sheep - "O"), Capra (goat - "C"), and undifferentiated Ovis/Capra (sheep or goat - "O/C"). The fourth number in that first column is a raw count of the number of specimens of birds and reptiles ("Av/Rp" = Aves/Reptilia). These last are discussed in Sections 7.4. and 7.5. below as well as in Chapter 4. Column two of each cell is composed of the sum of the contents of rows 1-3 of column one (O + C + O/C = Caprines or "O&C"), the standardized counts for specimens identified as Bos (cattle - "Bos") and other

mammalian taxa (e.g., gazelle, pig, equid, canid, porcupine - "oth"), and the sum of those three (O&C + Bos + oth = "Tot"). Column three of each cell includes percentages for each of the first three entries in column two based on the fourth entry in column two (i.e., "%O&C"+"%Bos"+"%oth" = 100%) as well as the percentage of sheep based on the total number of identified sheep and goat (O/(O+C) = "%O").

7.2.4. The Modification Tables

The upper left entry in a modification table cell is the same as the corresponding entry in the corresponding count/weight table cell, namely the total number of mammalian specimens ("tot") in that assemblage. The remaining entries in the first two columns are the number of specimens showing polish ("pol"), evidence of having been used as a tool ("tool"), blow marks ("blow") where distinguishable from carnivore chew marks ("carniv"), signs of rodent gnawing ("rodent"), traces of having been exposed to heat or fire ("burn"), and cut marks ("cut"). The third column of each cell includes percentages calculated from the foregoing including proportion of total gnawed by rodents ("%r"), chewed by carnivores ("%c"), burned ("%b"), and showing blow and/or cut marks ("%b&c").

Together with the skeletal parts tables presented in Chapter 8, the modification tables reflect the presence of human and non-human agents acting on individual specimens thus affecting the overall configuration of each faunal assemblage. I have argued elsewhere that specimens showing signs of use as implements should be excluded from overall faunal counts because "bones selected for use as tools reflect 'curate

behavior' (Binford 1973: 242, Shiffer 1976: 56). Such specimens are 'rescued from immediate deposition and recycled through various cultural activities to be discarded at the end of their useful lives in a manner largely independent of the disposal of the unwanted by-products of meat preparation and consumption' (Meadow 1980: 68)" (Meadow 1983: 374). Discussions with individuals who study bone tools, however, have made it clear to me that there are a number of problems with this position. There are different kinds of use that may or may not be easily identified as such on a bone; polish and striations can be imparted to a bone by means other than use as an implement (e.g., Brain 1981: 15-19); and the time-frames involved in "curate behavior" can vary markedly - from seconds to years. Given these circumstances, it seems best not to separate "tools" and "polished bone" from the various assemblages but to deal with them in a fashion similar to rodent and carnivore gnawed bone, namely attempt to identify patterns of differential representation that may reflect these various taphonomic processes. This is not really possible with the Gaz Tavila and Yahya assemblages since only 95 specimens out of the total of 18,590 tabulated here (half of one percent) show obvious signs of polish or could be identified as "tools" because of the presence of multiple attribute states such as being pointed, split, polished, shaped, and so on.

7.3. NOTES ON THE DISCUSSION

The various faunal assemblages from Tepe Gaz Tavila and Tepe Yahya, south side, Periods VII-IVC are discussed in their archaeological contexts in Sections 7.4. and 7.5. The contextual information about Gaz

Tavila was provided by Martha Prickett and is available in more detail in her work (Prickett 1986a: Appendix I). The archaeology of Yahya VII, VI, and V has been described by Thomas Beale (1978, 1986), while Yahya IVC has been presented by Daniel Potts (1980, in preparation). For all the Yahya material I also had access to and used the field notebooks. Figures illustrating the architectural configurations of the various periods are taken from Beale (1986: Yahya VII-V), Beale and Carter (1983: Yahya IVC) and Prickett (1986a: Gaz Tavila).

As a rule, at least one paragraph is devoted to each column as defined in the count/weight, species, and modification tables. Exceptions are columns containing row totals, detailed discussion of which is generally deferred to Chapter 8. In that descriptive paragraph (or those paragraphs), the various context types **which yielded bones** are discussed together with points of special note concerning their faunal assemblages. Almost all assemblages contained the remains of both large and medium mammals, principally sheep, goat, and cattle. Given the nature of percentages, the proportions of medium mammal and sheep/goat tend to vary inversely with those for large mammal and cattle. Usually, therefore, only the percentages for large mammal and cattle are noted. Occasionally there are significant representations of "other" in the count/weight tables and of "oth" in the species tables. These, of course, affect the percentages of medium/large mammal and sheep/goat/cattle and are also noted. For each context type, bones from rare taxa and bone tools found in the bone bags are individually characterized, and the locus codes of the included assemblage(s) are listed. Reference can be made to Appendix 3 for details about each

locus. The reader should note that the term "locus" is used in the sense of "lot" or "bone bag" and does not necessarily refer to the totality of an excavation unit. The bones from such a unit may have been divided and have received different locus codes or combined (by the excavator) with bones from another unit and therefore given the same locus code.

In 1973, long bone fragments were extracted from various Tepe Yahya loci and forwarded to Harold W. Krueger of Geochron Laboratories, Cambridge, Mass., for the purpose of experimentation on radiocarbon dating of bone. Of concern for this report are "Sample 2: ca. 2 kilograms of scrap (primarily from cattle bones with a fair amount of sheep and goat mixed in) from the fill and foundation fill of Area C Stratum 7 rooms" and "Sample 3: ca. 1 kilogram of scrap (primarily from cattle bones) from the fill below the earliest architecture and into the top of "sterile soil" in Area C of Tepe Yahya." Sample 2 included material from loci of VIIA-VIA, VIA, VIB1-VC, and VC, Sample 3 from VIIE, VIID, VIIC.2-1, and VIIC.1. The individual loci concerned are **marked with an asterisk** (*) when they are listed in the text below. No counts were made on this material and weights were not recorded by locus. This serious oversight on my part means that quantities reported from these loci in the count/weight tables are of questionable validity as far as representing what was actually recovered. The other tables are not affected, however.

A glance at any of the count/weight, species, or modification tables reveals many blank cells. Such cells reflect an absence of bones from those context types in those phases or reflect the fact that there

are no such context types in those phases. No special effort is made here to distinguish the two situations, the curious reader being referred to the archaeological reports noted above.

7.4. TEPE GAZ TAVILA-R37

7.4.1. Introduction

Tepe Gaz Tavila-R37, hereafter called R37, was tested by Martha Prickett in 1973 and found to contain 6.39 m of deposit "influenced by human activity" and dating between about 5200 and 4700 bc (5730 half-life; these determinations calibrate to 5800-5400 BC). Pottery from throughout the sequence is a dense, chaff-tempered coarseware often with a polished or burnished surface and is similar to that found in the early part of period VII at Tepe Yahya. Two excavations were carried out on the site (Prickett 1986a: Appendix I). First, a 5 m wide portion of the face on the east side of the site that had been created by erosion (Figure 2.3) was cut back c. 30 cm at the top and 130 cm at the base to make a vertical section. The loci from this excavation are listed in Appendix 3 with no test trench ("TT") number. Next, a 3 by 3.5 m test trench, designated "TT 1" (later growing to 4.5 m in length), was laid out extending west from the middle of the section. Most of the faunal material from the upper five of the six architectural phases originally defined in section come from this trench. Unlike the situation at Tepe Yahya (see below), the earliest architectural phase at R37 is numbered "1" and the latest "6" with sub-phases of 6 lettered from the earliest "A" to the latest "E". Note, however, that the strata in the section are numbered from "1" at the top to "23" at the

base.

Recovery of faunal remains at R37 was made without the use of screens, but all excavated sediment was carefully examined by the workers for small artifacts and bones. As a result, the average specimen weight from R37 (3.9 g) is almost as low as that from Yahya IVC.2 (3.5 g) most of which was screened through quarter-inch mesh (see below). The average medium mammal specimen from R37 is only 0.1 g heavier than that from Yahya IVC.2, while the average large mammal specimen is 2.3 g lighter. Because of the extra care taken in recovery at R37, the overall statistics for medium and large mammal remains are probably not strictly comparable to those from Yahya VII, the medium mammal component of the latter being somewhat under-represented.

Overall, the faunal assemblage from R37 includes 89.0 percent medium mammal bones, 9.5 percent large mammal bones, and 1.5 percent bones from other classes. Average specimen weights have been discussed above. The percentage of caprines as calculated for the species tables is 86.9 percent, of cattle 8.9 percent, and of other taxa 4.3 percent. Compared to Tepe Yahya, few bones are rodent gnawed (2.8%), there is only one identified example of carnivore gnawing, few bones are burned (1.6%), and there are only 3 bones with cut marks.

7.4.2. Description

(Tables 7.1-7.3, summarized in Tables 7.13-7.16 and 7.29-7.32; Figures 7.1-7.5)

For purposes of the faunal analysis, the material from strata 10-22 are grouped together under the term "**Natural**" in the count/weight,

species, and modification tables. To oversimplify somewhat, these bones come from 130-150 cm or more of site-derived sediments that were washed into position through flooding at the fan-toe where R37 is situated. (Note that Prickett (1986a: Appendix I) designates these strata as R37 periods I, II, and III, with the later six phases of architecture being period IV.) A total of 514 specimens were gathered from these UNDIFFERENTIATED FILL OUT loci (3503, 3505, 3512-3514, 3517, 3519, 3521-3530 in Appendix 3). In addition to sheep, goat, and cattle bones, there is a fox mandible (Vulpes vulpes, from stratum 19) and a bone tool made of a large mammal rib (stratum 17). The proportion of large mammal remains is 10.1 percent and of cattle (as calculated in the species tables) 7.0 percent. Average specimen size is somewhat less than for the assemblage as a whole, perhaps reflecting the "washed in" character of the assemblage although the nature of the bones (color, texture, sharpness of breaks) is not obviously different than that of the specimens from the rest of the site.

Turning now to the faunal remains from the architectural levels of R37, these are arrayed, left to right on the count/weight, species, and modification tables, from latest to earliest. Description will thus proceed from right to left. **Phase 1** (Prickett 1986a: phase IV-1) the earliest, is represented only by 59 specimens from the section that have been grouped together as OCCUPATION & FILL OUT & ASSOCIATED (loci 3516, 3518, 3520). They come from a packed mud surface associated with a wall and from wall fall and soft fill with brickbats over that surface. There are no noteworthy features about this assemblage.

The upper five phases of R37 architecture as represented in the test trench are a continuous series of rebuilt walls, partially filled and leveled rooms, and occupational surfaces. Each phase had at least one wall originally built in an earlier phase incorporated into its configuration. The earlier two phases (2 and 3) remain poorly understood because of the small area exposed (c. 2.7 sq.m for 2 and 3.5 sq.m for 3). The upper three phases (4-6), however, were uncovered over the whole of the test trench and were found to comprise a periodically rebuilt series of rooms disposed on either side of an east-west running exterior passageway or "alley". Walls were generally one thumb-impressed mud-brick wide, their exteriors covered with mud plaster.

Phase 2-1 material, classed as ROOM FILL IN & ASSOCIATED, comes only from the section and principally from the infilling of the phase 2 architecture although there is also some earlier phase 1 material included from the north side of the section. All were grouped together as coming from stratum 7 (locus 3515). The 95 specimens include 2 bone tools, these both being split and smoothed large mammal ribs. Some 9.5 percent of the collection comes from large mammals, but bone weights average lighter than for the site as a whole.

The 123 specimens from **phase 2** (Prickett 1986a: phase IV-2; see here Figure 7.1) come from soft OCCUPATION & FILL OUT & ASSOCIATED deposits in TT 1 (18 specimens from locus 3553) and from ashy ROOM FILL IN & ASSOCIATED excavated from the section (locus 3511 - 105 bones). A caprine femur shaft splinter from the latter has small bone flakes removed from one edge and may have been used as a tool. A medium mammal

long bone fragment from the other locus has some polish on it. There are very few large mammal bones from these contexts (8 or 6.5 percent) and average bone weight is thus very light (2.8 g).

The material in the column **phase 6-2** (locus 3558) are 60 bones from phases 2 and 6C that were inadvertently mixed (MIXED OR OTHER). Of the 60 specimens, 1 sheep radius shaft show signs of retouch (tool?).

From **phase 3** (Prickett 1986a: phase IV-3; see here Figure 7.2) come 102 bones found within a series of occupation surfaces associated with the ill-defined architecture of that phase in TT 1 (OCCUPATION OUT & ASSOCIATED - locus 3559). One caprine humerus shaft fragment has some striations and polish on it. The proportion of large mammal remains is 8.8 percent, but there are few specimens of the kind counted to compile the species tables (only 6, all sheep or goat).

The 43 specimens denoted as ROOM FILL IN & ASSOCIATED of **phase 4-3** come from the section (locus 3507 - stratum 6). The excavation unit was made up mostly of soft fill overlying the floor of the phase 3 architecture although the excavator notes that some phase 4 debris may also have been included. That this was indeed the case is attested by a bird ulna shaft fragment that joins another fragment from interior occupation and fill deposits of phase 4 (locus 3504). The species of bird represented remains unidentified. There is also 1 bone tool in the assemblage, this a retouched caprine scapula blade fragment that might originally have been a "scapula scraper" (see below, section 7.5.2: Yahya VIIB.2-VIIA). Even with only two large mammal bones in the assemblage, the average weight of the fragments remains relatively high.

The next group of material comprising 132 bones comes from a 114 cm thick layer of soft, ashy debris excavated as a unit from the northeast corner of TT 1 and assigned to **phases 5-3** (locus 3560). These OCCUPATION OUT & ASSOCIATED deposits include principally secondary trash dumped over a lengthy period of time and are separated in the middle by a phase 5 pre-construction leveling of bricks. The bones average markedly heavier than those from the site as a whole, this partly accounted for by the fact that 15.9 percent of them come from large mammals. There is also a gazelle scapula from this locus.

From **phase 4** (Prickett 1986a: phase IV-4; see here Figure 7.3) come 410 specimens, mostly from occupational debris associated with the south room (A) and the alley. This is the earliest phase known from over the whole area of the test trench, and the faunal assemblage is, correspondingly, that much larger than in the earlier levels. OCCUPATION IN material all comes from 22 thinly layered strata of organic matter above the construction surface of room A (locus 3556). The 110 bones include only 4 large mammal specimens (3.6%). The average weight of the specimens is low, reflecting the fact that they came from strata averaging about 1 cm thick. From more or less the same context, but from the section, come the 132 fragments classed in the tables as OCCUPATION & FILL IN (locus 3504) to denote the less discrete nature of the excavation unit. The other part of the bird ulna noted for locus 3507 was found here. Interestingly there is part of a lumbar vertebra from a large mammal in this locus, the other half of which is included in a locus of phase 6C-D (3506). This indicates that there was some mixing of material when the section was dug. The proportion of large

mammal bones is somewhat higher than in the other room A deposits (11.5%) but those bones are smaller and the average specimen weight remains the same (2.7 g). The one fragment of a bone tool from this locus is a piece of a split and smoothed large mammal rib.

From the OCCUPATION OUT & ASSOCIATED deposits of the alley come 156 specimens (locus 3561). Their average weight is almost twice that of the room A materials, but the proportion of large mammal bones remains low (7.1%). There is one fragment of a gazelle skull from this locus. Finally, there are 12 specimens coming from leveling at the base of phase 4 complex (PLATFORM OR LEVELING - locus 3554).

From the area of room B in the southwest corner of the test trench and belonging to **phase 5 or 4** are 8 specimens (ROOM FILL IN & ASSOCIATED - locus 3551). Of interest from this locus is a gazelle proximal humerus and a pair of matching goat first phalanges.

Some 49 specimens were recovered from the upper five strata of the section. This MIXED (OR OTHER) assemblage from **phases 6-4** contains no specimens worthy of special note.

From **phase 5** (Prickett 1986a: phase IV-5; see here Figure 7.4) were excavated 596 bones, 442 of which come from the alley. Some 398 of these are classed under OCCUPATION & FILL OUT & ASSOCIATED (loci 3557, 3562, 3563) and 44 under UNDIFFERENTIATED FILL OUT (locus 3501, stratum 3 from the section). In the occupational assemblage there are 2 gazelle bones (scapula fragment and third phalanx) and a polished caprine scapula blade fragment (another "scapula scraper"?). About 10 percent of the bones are from large mammals, and there are some rather heavy specimens represented in that group including a complete cattle

scapula. Also from the alley is the only bifid dorsal spine of a cattle thoracic or lumbar vertebra found in the assemblages from Tepe Yahya and R37 that are reported here. Such a cleft spine is considered diagnostic of humped (zebu) cattle - Bos indicus (see Chapter 5).

Most of the rest of the phase 5 collection comes from interior loci. Some 90 specimens are from OCCUPATION IN deposits of room 1 (center south side of the test trench - loci 3539, 3542) and room 6 (south east corner of the test trench - locus 3548). Of note are 2 gazelle bones (pelvis fragment and calcaneum), a medium mammal bone with polish on it, and a retouched and polished goat distal radius. Relative to other assemblages at R37, that from these rooms has a high proportion of bones with rodent gnawing (13.3%). The percentage of large mammal bones is low (4.4%) in contrast to the situation from the alley, but the average weight of medium mammal bones is higher than in the alley perhaps because of the absence of the large numbers of small shaft fragments found in the latter context. Also from rooms come 20 specimens from OCCUPATION & FILL IN deposits in room 4 (southwest corner of the test trench - locus 3546) and 40 bones from ROOM FILL IN & ASSOCIATED (locus 3567) above the deposits from that room discussed above. Of note from the latter assemblage is the pelvis of a hare (Lepus capensis). Finally there are 4 bones from PLATFORM OR LEVELING deposits at the base of phase 5 constructions (locus 3533).

There are 14 specimens from **phase 6-5** deposits, 12 from between closely set WALLS north of room 6 (loci 3502 and 3534) and 2 from ROOM FILL IN & ASSOCIATED debris from the north side room D. There are no bones worthy of special note from these loci.

Phase 6 (Prickett 1986a: phase IV-6; see here Figure 7.5) represents the final set of excavated materials from R37. For convenience it was divided into 4 parts (A-D), each representing a sequential change in the architectural configuration. What I have called "6E" includes the latest, unsealed fill of phase 6 along with material from just below the surface of the site.

Sub-phase 6A is characterized by leveling operations and the 22 bones come from a PLATFORM OR LEVELING locus (3552). There is no faunal material from sub-phase 6B.

From **sub-phase 6C** come 145 bones including 32 from OCCUPATION & FILL OUT & ASSOCIATED deposits in the alley (loci 3541, 3549), 26 from ROOM FILL IN & ASSOCIATED debris from the central north side (locus 3555 - soft fill used to level the area of phase 5 room E), and 87 specimens from UNDIFFERENTIATED FILL OUT (loci 3532, 3550) again in the area of the alley. All of these contexts, the characterization of which is somewhat arbitrary, contained soft, somewhat ashy, material that was either occupational debris deposited over some period of time or fill used to level the area for the phase 6 architecture built on the north side of the alley. Of note are are a gazelle humerus shaft fragment and a hare (Lepus capensis) upper incisor from the "occupation and fill" deposits, a gazelle tibia shaft from the "room fill", and a nearly complete cattle mandible, a Canis sp. cervical vertebra, and a gazelle scapula from the "undifferentiated fill". Overall, the bones from these loci are considerably heavier than the site averages. Furthermore, the percentage of large mammal bones is relatively high (14.5%), as is the proportion of rodent gnawed material (11.0%).

Some 61 specimens are assigned to **phase 6D and/or C.** The five loci have been grouped into three context types all of which, however, seem to have had some leveling functions. From ROOM FILL IN & ASSOCIATED (locus 3506 - stratum 2 in the section and mostly from room 9; locus 3571 - central south room 1) come 36 specimens, from UNDIFFERENTIATED FILL OUT in the alley (locus 3572) come 11 specimens, and from PLATFORM OR LEVELING deposits in the areas of room 6 (southeast corner - locus 3538) and room 4 (southwest corner - locus 3545). Of note in the last are a pig lower incisor and a fox (Vulpes vulpes) lower right first premolar. This last specimen probably goes with the mandible from 3529 ("Natural Deposits") and thus indicates some mixing of materials. Large mammal bones make up almost 25 percent of this small collection of material, but the fragments are of rather small size.

From **phase 6D** deposits there are 102 specimens including 12 from an OCCUPATION IN context immediately above the floor of room 2 (northwest corner - locus 3547). The other 90 specimens come from loci grouped in the same way as those from phase 6D-C. Thus there are 10 specimens from ROOM FILL IN & ASSOCIATED (room 3 - center north side - locus 3536), 20 bones from UNDIFFERENTIATED FILL OUT in the alley (locus 3568), and 60 pieces from PLATFORM OR LEVELING operations (loci 3535, 3564). Overall for phase 6D, the proportion of large mammal bones is 14.7 percent.

Finally for R37, the material denoted as **phase 6E** has been been divided into two parts. Some 185 specimens come from largely unsealed ROOM FILL IN & ASSOCIATED deposits throughout the area of the test

trench (loci 3543, 3544, 3566, 3569, 3570). Of note are a hare (*Lepus capensis*) mandible and a small fragment of a tool made of a medium mammal bone (the one from room 2, the other from the area of rooms 3 and 9). Large mammal bones make up 11.4 percent of the assemblage but they tend to be fragments of rather small size. From fill deposits just below the surface of the site there are 100 specimens (MIXED OR OTHER - loci 3510, 3531, 3537, 3540, 3573, 3574). Of note are a gazelle mandible and the fact that there are only 3 light-weight large mammal bones from the loci.

In conclusion, while the R37 assemblage appears large, only 327 of the 2818 mammal specimens (11.6%) are included in the counts of the species table. Thus for most purposes it is necessary to group all the material from the site together as an undifferentiated unit.

7.5. TEPE YAHYA

7.5.1. Introduction

In the case of Tepe Yahya, periods (IV, V, VI, VII), sub-periods (A, B, C, etc.), and phases (1, 2, 3, etc.) are labeled in reverse order to their chronological sequence. Thus, IVC.1 is the latest phase discussed while VIIE is the earliest sub-period on the site. Presentation of the material, however, is from earliest to latest. The reader should note also that **the word "Area" with an uppercase "A"** is used to refer to each of the 10-by-10 m squares that comprised the step-trench down the south side of the mound. These trenches are, from top to bottom, Areas A, B and BW(est), C and CW(est), CDE(ast), D, and E (see Figure 2.2).

7.5.2. Yahya Period VII

(Tables 7.4-7.6 summarized in Tables 7.17-7.20 and 7.33-7.36; Figures 7.6-7.9)

VII is the earliest period defined at Tepe Yahya, probably overlapping in time with but running later than Tepe Gaz Tavila. Estimated dates are 4900-3900 bc (5730 half-life, uncalibrated; calibrated: c. 5600-4600 BC). Three major architectural complexes were defined as VIIC, VIIB, and VIIA with a fourth, earlier, one (VIID) represented by the corner of a room. All are characterized by rather small rooms with thin walls made of thumb-impressed mud-bricks. The pottery is a coarse, chaff-tempered, slab-constructed ware that, especially in the earlier levels, is sometimes burnished.

VIIE (loci 160, 833*) is labelled as such for the sake of convenience. The 55+ faunal specimens (some were removed before analysis) apparently come largely from rodent burrows in otherwise "sterile" horizontally-bedded lakebed clays that lie beneath the cultural mound of Tepe Yahya. The rodent principally implicated is Tatera indica, the Indian gerbil. As noted above (Chapter 6), through time these animals came to riddle the mound with their burrows. Only 4 of the 54 mammal bones from VIIE, however, show obvious signs of rodent gnawing. This unremarkable proportion (7.4% as compared with 6.7% for Period VII as a whole) seems to indicate that the activities of rodents can go largely undetected if material is not found clearly associated with rodent burrows. In fact, having excavated in some of these "sterile" sediments, while I can confirm the presence of rodent burrows,

the bones were not always unequivocally associated with them. This, of course, begs the question of how the bones (and flints and small sherds) got there, a question to which I have no ready answer. Perhaps they are trash from an earlier occupation some distance to the north of this part of Area C (as is the case with the material in the early part of VIID), perhaps they reflect other processes of "downward migration" of materials into sterile sediments, or perhaps the rodent holes were actually there and their outlines became sufficiently obliterated to become invisible to the excavator working in a poorly lighted, meter-square hole. There is nothing remarkable about the faunal assemblage of VIIE saving the presence of single specimens of Sus and Testudo.

For **VIID**, the 211 bones come from two types of contexts: ROOM FILL IN AND ASSOCIATED (loci 157, 179, 180: 166 specimens) and UNDIFFERENTIATED FILL OUT (loci 780, 817*, 827*, 850*, 867*: 54 specimens). The former includes fill deposits in and around the corner of a room that protruded into the excavated part of Area C (Figure 7.6, upper left corner). The relatively large number of partly burned bones (43) come from associated ashy deposits. The proximal end of a Bos metatarsal from locus 180 has polish on it and could have been used as a tool. The astragalus of a gazelle came from the same locus. The second type of context comprises deposits more distant from and underneath the room including thick lenses of compact steeply sloping fill into which a single burial had been dug. These strata seem to represent slope wash that includes material from a settlement located farther to the north on top of a sloping-sided mound. One gazelle horncore is the only specimen

of note. Some large mammal shaft fragments were removed before analysis (see above).

The count/weight and species tables reveal little difference in the composition of the assemblages from VIIE and VIID, medium mammals contributing about 70 percent and large mammals about 30 percent. The standardized percentages for sheep/goat are 80.0 and 78.3 percent while those for cattle are 13.3 and 19.6 respectively for VIIE and VIID. It is not particularly safe to say anything about bone weights because of the specimens removed before analysis from both assemblages.

With VIIC, identified only in Area C and a small part of Area D, we have a sub-period that has been divided into two phases. Phase **VIIC.2**, the earlier, includes habitational remains and associated walls built on the sloping deposits of VIID (Figure 7.6). Solid, bricky fill surrounded the complex while the room fill is described as soft, loose, and "trashy." During excavation, bones from inside rooms were not kept separate from those coming from outside and so everything has to be classed as "associated." OCCUPATION AND FILL (OUT AND) ASSOCIATED yielded 213 specimens (loci 2126, 2127, 2128, 2129) from on and above habitation surfaces of the complex. Included is one bone tool and one female gazelle horncore, both from locus 2126. (ROOM) FILL (IN AND) ASSOCIATED provided 132 specimens (loci 2118, 2119, 2120, 2122, 2123, 2125) from the bricky fill in and around the upper part of the complex. Again, sheep, goat, cattle, and gazelle (one scapula and one female horncore) are the only taxa identified. The count/weight table indicates that the average specimen size for the occupational contexts is considerably smaller than that for the pure fill contexts. While

this lower average weight accompanies a lower proportion of large mammal bones (25% vs. 39% in the fill), it is also true in an absolute sense for both medium and large mammal bones. Whether this reflects more careful collection of faunal materials from occupational deposits or is a valid manifestation of disposal and depositional phenomena is not altogether clear.

Phase **VIIC.1**, having 135 bones from only one type of context - UNDIFFERENTIATED FILL OUT (loci 701, 749, 813, 816*, 831*, 836*, 852*, 2114, 2117, 2121, 2124), is placed in the same column on the count/weight, species, and modification tables as **VIIC.2-1**. The latter has been classified, like some of that from VIIC.2, as (ROOM) FILL (IN AND) ASSOCIATED, but the excavation units producing these 25 specimens (loci 178, 763*, 824*, 829*, 847*) could not be assigned unequivocally to one or the other phase of VIIC.

Phase 1 deposits are compact sloping fill again, like lower VIID, outside of the area of habitation at that time. Four human burials were found in these deposits (Figure 7.6). Beale (1986:109) notes that north of Burial 1, "an articulated femur and pelvis of Bos were recovered" and that associated with Burial 3 were "several chaff-tempered coarse ware sherds and a few bones of Bos." Unfortunately, the faunal material was labelled in such a way that it is not possible to be certain which are the specimens that were associated with these burials. In any event, given the rather casual manner in which these burials were apparently interred, it seems unlikely that the cattle bones (or cuts of meat they might have represented) were intentionally included as grave goods. Instead it seems more likely that they were

part of the deposit in which the burials were laid. The large mammal proportion from this group of loci is very high (44%), there being in addition single bones of _Sus_ (tibia shaft fragment) and _Canis_ (proximal ulna) from locus 813 (excavation unit: C.70.t6.2) that was labelled on the bone bag as being associated with "Burials". There are, however, no cattle bones from said locus although lower limb bones from 831 and 852 (both from the same excavation unit as 813) could be those said to come from near Burial 3. The single bone tool, a split and smoothed large mammal rib fragment, came from locus 2117 as did the shaft fragment of a gazelle humerus.

Given the large number of bones from VIIC.1 identified as cattle or large mammal, the average weight per bone is much higher than that in VIIC.2. This is perhaps due to the removal of smaller large mammal shaft fragments from the collection before analysis (see above). The same applies for the assemblage from VIIC.2-1, 48 percent of which comes from large mammals.

For sub-period VIIB, there are ten columns each on the count/weight, species, modification tables. This reflects the division of that sub-period into six phases and the presence of many excavation units that could not be assigned definitely to one phase or another. The VIIB architectural configuration as a whole was a periodically rebuilt series of 1-1.5 meter-square rooms of unknown function that covered up to 200 sq.m of excavated area (Figures 7.7, 7.8). None of the rooms had any hearths, floors were hard to identify and were largely devoid of any debris, and most rooms had no evident doorways. Walls were generally one mud-brick thick and most were extended in height

(rebuilt) at least once, although at no time was the whole complex rebuilt all at the same time. Instead, parts of the complex fell out of use at different times and were rebuilt after having been filled in with debris and with intentionally demolished walls, this providing a classic case of alternating or "spiral" stratigraphy. The small rooms, bordered on the south by a wide curving mud-brick wall, seem to have been originally constructed at the base of an existing mound since to the north of the rooms of phases 6-3 were retaining walls built to hold back ashy midden debris that, in fact, began accumulating on the slopes of the mound before the complex was begun and on which part of the complex was originally built. From the corner of a room (20) that existed from phases 4-2 came a unique female figurine of chlorite with associated stone and bone tools that were probably used in its manufacture. These were published by Lamberg-Karlovsky and Meadow (1970).

Because a large portion of the VIIB complex was uncovered during the 1968 season and because there are no faunal collections from that season, the available material is more limited than it might otherwise have been. Even so there are some 3493 mammal and 19 bird or reptile bones recorded, making it the best documented sub-period before IVC.

For **VIIB.6** there are only 30 specimens: 24 from OCCUPATION OUT AND ASSOCIATED loci (880, 887, 892, 893), 2 from an OCCUPATION AND FILL IN locus (884 - south corner of room 7), and 4 from an OCCUPATION AND FILL OUT AND ASSOCIATED locus (888). All come from within the confines of what was excavated as the northeast part Area E in 1969 (actually including part of Area D: Figure 7.7). Obviously with such small collections it is difficult to say much. Only sheep, goat, and cattle

are represented.

Excavation units that could belong to **VIIB.6** or **5** yielded 67 specimens. Some 11 are from an OCCUPATION IN locus (883 - room 22 floor deposits) while 47 are from OCCUPATION AND FILL IN loci (876, 878, 881 - again room 22 floor and above - and 877, 885, 889 - room 21 floor and above). From each of the two rooms involved, again in Area E (Figure 7.7), came single carapace fragments of Testudo while in room 22 was found the distal tibia of Equus hemionus. Otherwise only sheep, goat, and cattle are represented, the overall proportions of large and medium mammal remains being 40 and 60 percent respectively and the average specimen weight being a moderately high 11.6 grams.

One locus with 79 specimens (2115) from Area C has been classed as OCCUPATION AND FILL OUT AND ASSOCIATED and could belong to any or all of **VIIB.6-4**. This part of the mound was apparently open space with some occupational trash being deposited during these phases (Figure 7.7). The proportion of medium mammal bones is relatively high (80.8%) and the average specimen weight correspodingly lower (9.1 g), although there were still several good-sized large mammal bones present. One Testudo carapace fragment comes from this locus along with a male gazelle horncore. The one bone tool is a shaped Bos scapula fragment.

Phase **VIIB.4** has yielded 164 specimens from OCCUPATION AND FILL (OUT AND) ASSOCIATED loci (1941, 1942) in Area CDE and 65 specimens from an UNDIFFERENTIATED FILL OUT locus (2305) in Area D. The former could have come from within rooms 25 and 26, but lack of specific labelling on the bone bags did not permit this to be ascertained. The latter comes from laminated fill between but stratigraphically below Phase 2 rooms 28

and 29 (Figure 7.8). While the proportion of cattle as noted in the species table is high (56.4%), the proportion for large mammal in the count/weight table is much lower (39.3%). What this reflects, in this instance, is a relatively higher proportion of better preserved cattle bones; many of the bones identified as sheep/goat lack articular ends and thus were not counted for the species tables. This is not an uncommon phenomenon for Period VII, but is most marked in this instance. Average bone weight is moderate, much like that for VIIB.6-5, but while the average size for large mammal bone is the same, mean size for medium mammal bone is much smaller, a discrepancy that is due to 368 g of smashed and therefore unclassified bone from Area CDE. Only sheep, goat, and cattle were identified from this phase.

The 101 bones from **VIIB.6-3** come from ashy MIDDEN-like deposits in Area C (locus 2112 - because of the nature of the matrix, this locus is classed as "midden" instead of "occupation and fill out and associated"). Noted above was the fact that this area was devoid of significant architectural remains after VIIC and before VIIB.2. These ashy deposits occur beneath a series of transverse walls on the slope that served as part of the foundation for phase 2 architecture (see below). From this locus come a gazelle scapula and a shaped and polished bone tool made on a large mammal long bone shaft fragment. Otherwise only sheep, goat, and cattle are represented. Here the proportion for large mammal in the count/weight table (27.7%) is markedly higher than that for cattle in the species table (12.5%), the reverse of the case for phase 4 noted above. The average specimen weight is moderate to low, kept high by some relatively big large mammal

bones.

The MIDDEN deposits of phases **VIIB.5-3** (loci 2307, 2308, 2309), partly dry-screened, yielded 1103 specimens including 2 from Testudo, 2 from birds (an ulna fragment unidentified and a tibiotarsus probably from the partridge Alectoris chukar), and 2 from gazelle (proximal humerus and femur shaft). This material, from one excavation unit of sloping ashy deposits in the northwest corner of Area D (Figure 7.7), represents just under one third of the 3511 bones bones from sub-period VIIB. Since it was partly screened, the various proportions and indices might be expected to be non-comparable to those determined for all the other, non-screened, deposits of Periods VII, VI, and V. Indeed, the percentage of medium mammal remains is very high (83.6%), but, in fact, not that much higher than those from the unscreened deposits of phases 3 and 2 (78.0 and 78.1% respectively). The percentage of sheep/goat is also high (88.2%), but again not that much higher than in phase 3 (85.9% - it is lower in phase 2, being 73.1%). What are different are the average specimen sizes, these being lower than for any group of materials until the screened deposits of sub-period IVC. Small average specimen weight, then, is clearly a reflection of screening. It should be noted, however, that specimen weights for all the later phases of VIIB are lower than those for the earlier phases, this probably being a reflection of the fact that the deposits are either ashy, midden-like, primary and secondary deposits found in and around what probably were domestic structures or else soft, laminated, slope wash containing few larger specimens.

Also unique to this material from midden deposits of VIIB is the high proportion (20.2%) showing signs of burning. This seems clearly to be related to the ashy nature of this secondary deposit. On the margins of the settlement of this phase, the area was used as a repository for hearth sweepings. Many of the bones could, in fact, have been tossed into hearths during meals and then transported with the ashes to the dump. It is noteworthy in this regard that there are large numbers of fully or partly calcined (oxidized) specimens and of charred black (reduced) specimens but few specimens characterized as showing only slight signs of burning. This clearly indicates the presence of active hearths, and not merely warm ashes, when the specimens were burned. Finally, there were three pieces of worked bone identified in these assemblages. One is made of the shaft of a medium mammal long bone and a second is merely a tiny fragment of something shaped and polished. The third "tool" is a sliver of a proximal metatarsal of sheep or goat with an incised longitudinal goove.

Phase **VIIB.3** is represented in Area C and the north part of Area D generally by soft and laminated, but sometimes by bricky fill between single-brick-high retaining walls and on top of ashy phase 4 deposits. This phase was probably merely constructional, the walls and fill around them serving as a foundation for the phase 2 architecture above. It is possible, therefore, that some of the deposits are tertiary in origin (brought in from elsewhere for fill). The architecture in Area D continued to be used during this phase. From OCCUPATION AND FILL OUT AND ASSOCIATED deposits there are 309 mammal specimens (loci 2106-2110, 2113, 2116, 2302); from UNDIFFERENTIATED FILL OUT come 119 mammal bones

(loci 2304, 2306). From each context type there are single pieces of Testudo carapace and from a locus of the first type comes a gazelle ulna. As noted above, the medium mammal and sheep/goat components are high (78% and 85.9% from the count/weight and species tables, respectively) and the average bone weights reasonably low (overall average, 5.1 g).

Of the 62 specimens from **VIIB.3-2** loci, 2 come from UNDIFFERENTIATED FILL OUT (locus 2105) and the remainder from OCCUPATION (OUT AND) ASSOCIATED (loci 2101 and 2111). These latter include 3 specimens of Testudo; all the other identified remains are sheep, goat, or cattle. All except the two specimens from fill come from cleaning the phase 2 complex and thus may include some phase 3 material. Even given the small size of the assemblage, the various proportions are very much in line with those from phase 2.

The 958 bones from the **VIIB.2** architectural complex are just over 27 percent of the 3512 specimens from VIIB. Most of this material comes from primary and secondary deposits on top of floors or within series of occupational surfaces. This collection is one of the best from Tepe Yahya in terms of size of assemblage coming from excellent quality contexts. Since the phase 2 complex extended over all of Areas C, D, and CDE (Figure 7.8), it is again unfortunate that there are no faunal remains from the 1968 excavation season. Almost all of the bones come from in and around the architecture in Area C.

Some 588 specimens are from OCCUPATION IN loci in room 2 (206 bones from loci 191, 199), room 3 (169 bones from loci 189, 190, 214), room 4 (46 bones from locus 196), room 5 (95 bones from locus 198), room 6 (51

bones from loci 187, 208), and room 8 (12 bones from locus 195) north of courtyard 23 and from room 25 (9 bones from locus 2303) south of the courtyard. According to the field notes, this material was generally found against the sides and in the corners of the rooms in rather ashy deposits immediately on the floors or within floor deposits. Of note are a Testudo peripheral, a pig radius shaft fragment, and a gazelle metatarsal shaft fragment from room 2, a gazelle mandible from room 3, a pig proximal radius and ulna and a gazelle humerus shaft from room 4, a gazelle tibia shaft from room 5, and a gazelle proximal tibia and a carpo-metacarpus of an eagle owl (Bubo bubo) from room 6.

Almost 82 percent of the mammal bones from these interior loci come from medium-sized animals and 16 percent from large, these proportions corresponding closely to those of sheep/goat (78.6%) and cattle (17.5%) determined from the selected subset of elements as tabulated in the species table. Average bone weight is low, being 4.5 g overall, 2.9 g for medium mammal, and 12.5 g for large mammal bone. This is in marked contrast to material from adjacent exterior loci where, for 99 specimens, the overall average weight is 15.4 g, with 4.8 g for medium mammal and 43.3 g for large mammal bone. The percentages of medium and large mammal bone are somewhat less (71%) and more (27%) respectively, this paralleled by the proportions of sheep/goat (74.4%) and cattle (18.6%), although these last are little different from those for the interior loci. In sum, larger bones as well as more bones from larger animals are found in the exterior loci. This is a situation parallel to that defined by me at Hajji Firuz (Meadow 1978a).

The 99 specimens from OCCUPATION OUT loci come from courtyard 23 (48 specimens from loci 200, 203, 213), alley 7 (37 specimens from loci 184, 186, 193, 202, 204, 210), and from north and immediately to the west of the Area C complex (14 specimens from loci 201, 205). A single gazelle lower third molar comes from the courtyard. The alley was noted as having been a dumping area with loose ashy fill containing many sherds, bones, stone artifacts, and organic matter that might have been dung. Most of the bones from open areas around the complex presumably came from close to the sides of the buildings since deposits farther away are described as compact ("beaten") earth almost devoid of material. A bone awl is noted as coming from the courtyard, but it was not included in the faunal collection.

One feature characteristic of the assemblages from deposits both inside and outside of the complex surrounding courtyard 23 is the rather high proportion of bones showing signs of rodent gnawing: 12.8 percent for interior, 18.2 percent for exterior material. (The proportion for Period VII as a whole is 6.7 percent). Unlike, for example, material from midden deposits (less than 1% gnawed from the phase 5-3 midden, 1.6% for all midden deposits in Period VII), the occupational debris from the phase 2 complex was clearly accessible to rodents, that from outside the complex perhaps somewhat more so than that inside. Interestingly, only 3 carnivore gnawed specimens were identified, these all from inside the complex (one each from rooms 2, 3, and 5). All of this together might indicate that the complex was abandoned for some time before its ultimate destruction and leveling in phase 1 for the sub-period VIIA complex.

Also assigned to phase 2, but perhaps slightly earlier than the debris from in and around the court 23 complex are 27 specimens from ashy MIDDEN deposits (loci 185, 855) contained by walls on the west side of the courtyard and 244 bones from OCCUPATION AND FILL OUT AND ASSOCIATED (loci 855, 2102-2104). This latter material includes 11 specimens from the northeast corner of what was excavated as Area E in 1969 (locus 855 - actually in the southeast corner of Area D), the remainder coming from layers of laminated fill immediately below the architectural complex in Area C. Of note are 5 gazelle bones (horncore, scapula, humerus shaft fragment, metacarpal shaft fragment, and proximal metatarsal), a bird bone (from a francolin or partridge), 2 bone tools (smoothed and shaped pieces of bone of undetermined mammalian origin), and what seems to be a fossil mammal tooth from an unidentified taxon. All of these come from the Area C loci. If the contributions of the material from Area E (10 large mammal, 1 medium mammal, 513.5 g total of which 510 g are large mammal) are subtracted from the cell totals in the count/weight table, the proportion of medium mammal comes to 82.3 percent (75.9% sheep/goat) and of large mammal to 15.5 percent (17.2% cattle), with the average weight being 3.7 g. These figures are similar to those seen in the phase 2 interior loci, although the average specimen size is even smaller. In contrast are the situations in Area E and in the midden deposits both of which are dominated by heavy large mammal bones and small, light medium mammal fragments. From the midden, all except 2 large mammal bones and the single bone tool (made of a large mammal bone) were burned.

Material from VIIB.1 and from VIIB.6-1 are summarized in the same column on the count/weight, species, and modification tables. From the **VIIB.1** OCCUPATION AND FILL OUT AND ASSOCIATED loci (182, 183, 192, 194, 197, 206, 207, 211, 212, 215, 2301) come 374 specimens including 3 from <u>Testudo</u>, 1 from a bird (ulna shaft from a golden eagle or a lamergeir), 1 from a pig (humerus shaft), 4 from gazelle (humerus shaft, 2 distal humeri, first phalanx), and 3 bone tools (2 made on large mammal, 1 on medium mammal bone fragments). About 10.8 percent of the mammal bone is rodent gnawed, a proportion the same as the overall figure for phase 2.

Like phase 3, phase 1 seems to have been non-occupational deposits with brick fill and platforms as well as loose debris serving to form a foundation for the sub-period VIIA architecture. Most of the bones come from loose, unconsolidated fill in the eastern part of Area C, although some 18 specimens are from just north of the architecture in the northernmost part of Area D. Again the composition of the assemblage is in line with those from phase 2 with medium mammal bones making up 78.4 percent of the collection and large mammal 20.8 percent. The proportions for sheep/goat and cattle are 70.6 and 25 percent. Average weights are somewhat higher than those from comparable contexts of phase 2.

Loci assigned to **VIIB.6-1** (713, 754, 764, 765, 839) are UNDIFFERENTIATED FILL OUT units excavated in the northwest corner of Area C that consisted of compact fill deposited over some span of time during sub-period VIIB. The 78 specimens include one pig calcaneum and a bone tool made on a large mammal long bone fragment. Large mammal

remains make up 30.8 percent of the collection, medium mammal 65.4 percent, values for cattle and sheep/goat, respectively, being 20.0 and 73.3 percent. Average bone weight is a moderate 11.7 g.

In sum, of the 3512 animal bones analyzed from **VIIB**, 3493 are from mammals: 77.4 percent medium, 21.3 percent large. Proportions for sheep/goat and cattle are 75.0 and 21.9 percent respectively, very close to those for medium and large mammal, the difference largely made up if standardized counts for gazelle are added to the sheep/goat category. Overall, 28.7 percent of the 167 identified sheep or goat bones come from sheep, this being a ratio of about 2.5 goat to 1 sheep. Burned bone makes up 8.1 percent of the mammal assemblage, most of it coming from the midden deposits of VIIB.5-3. Some 6.2 percent of the assemblage is rodent gnawed, most of this accounted for by the occupational deposits of VIIB.2. Remarkable are the small numbers of bones with cut or blow marks (15 total) and signs of carnivore gnawing (12), less than half of one percent in each case.

Turning now to the column in the count/weight, species, and modification tables for **VIIB.2-VIIA**, the 581 bones all come from UNDIFFERENTIATED FILL OUT in Area CDE (loci 1935-1940). This extension to the east of Areas C and D (Figure 7.8) apparently had no architecture during phases B.3-1 or sub-period A, being an open area into which hard, bricky fill was deposited at some time(s) after B.3 and before Period VI. Some 477 of the bones come from mammals, 70.6 percent medium, 28.7 percent large, these proportions being similar to those from VIIA, higher in the large mammal category and correspondingly lower in the medium mammal category than in VIIB as a whole. Average specimen weight

is also higher overall.

There are a significant number of interesting specimens from these Area CDE loci. Included are 4 gazelle bones (horncore from a male, maxillary, scapula fragment, and tibia shaft), a pig proximal ulna, 4 bones from Equus hemionus (proximal radius, distal tibia, and 2 first phalanges), 4 pieces of the carapace and plastron of Testudo (including a large fragment with 3 pleurals that has a smoothed edge and may have come from a vessel formed out of a complete carapace), and a fourth carpal with an identification of Camelus sp. This last, bleached white, is almost certainly out of place, perhaps coming from surface deposits and accidentally added to a bone bag. Except for this one specimen, camel remains are unknown at Yahya until the strata between sub-period IVA and period III (?late second millennium B.C.) There are 2 bone tools and 1 piece of polished bone from these loci as well. A large mammal rib has longitudingal striations with polish and a large mammal bone fragment is shaped and polished. Of greater interest is a cattle scapula including glenoid cavity, neck, and part of the caudal margin. The last seems to have been shaped and then polished during use as a tool. Somewhat earlier comparisons might be the "scapula scrapers" from Djeitun (e.g., Masson and Sarianidi 1972: 35) and Hajji Firuz (Voigt 1983, pl. 31a).

The final group of contexts from this period are assigned to sub-period **VIIA**. This occupational episode was recognized in Areas B, BW, C, CW, D, and CDE with bones coming principally from Area C and some from soft, organic fill in Area B (MIDDEN: loci 1373-1376; 64 bones). The architectural complex, poorly preserved and filled with bricky

debris (ROOM FILL IN AND ASSOCIATED: loci 158, 161, 175, 188; 264 specimens) is bordered by a large courtyard to the north and by the edge of the mound at that time to the south (Figure 7.9). A sloping alley led into the courtyard from the south dividing the complex into two parts. Over the room fill as well as over the area of the courtyard was additional bricky debris that may have resulted from leveling the area to serve as a kind of platforming for Period VI constructions (PLATFORM OR LEVELING loci 732, 737, 751, 757, 793, 815, 832, 837, 842, 862, 866; 101 bones). In such deposits, there could be tertiary debris brought from elsewhere. Immediately on top of the floor of room 11 was RUBBLE (locus 822; 16 specimens) including split cobbles, sherds, and bones. Such tertiary deposits are characteristic of the following Period VI, this being their earliest occurrence at Yahya. There are no bones from discrete interior occupational deposits and only 12 specimens from OCCUPATION OUT AND ASSOCIATED (locus 174), these coming, however, from laminated deposits to the south of the complex that later than the main occupation of the area. OCCUPATION AND FILL IN deposits come from room 4 (locus 164: 28 bones), room 5 (locus 163: 39 bones), room 8 (loci 162, 166: 6 bones), room 9 (loci 168, 172, 209: 15 bones), and room 10 (loci 170, 173: 37), there being a total of 125 specimens. Much of this, again, may have come from the bricky fill. Finally, 69 bones come form a single locus (165) of bricky OCCUPATION OUT AND ASSOCIATED deposits just to the north of the Area C complex.

Specimens of note in the VIIA collections include 18 Testudo bones, 17 of which come from a single room fill locus (161) and 1 from the midden. A pig distal ulna and a gazelle proximal metatarsal come

from those same contexts, respectively, along with a lone bird bone (from a francolin or partridge), a split and polished large mammal rib, a smoothed piece of bone, and 3 polished large mammal bone fragments from the room fill. From the midden come two cattle lower third molars with the crowns broken in antiquity in such a fashion that they look like they may have been employed for some sort of scraping procedure. There is also a cattle mandible fragment with a high polish on it that was probably used as a tool. We shall encounter more of the latter in occupational deposits of VIB.1 and in the furnace area of Yahya VA.

There is a good deal of variation in the compositions of the different contexts of VIIA. In groupings with over 50 specimens, the range for medium mammals varies from 46.0 to 88.0 percent and that for large mammals from 8.8 to 49.2 percent. The highest levels for large mammal remains come from the midden deposits, the lowest levels from the occupation-and-fill deposits (both interior and exterior). Average bone weights vary accordingly. The overall average counts for VIIA are 69.5 percent medium mammal and 28.5 percent large mammal, proportions intermediate between those for sub-periods VIIB and VIB. The percentages for standardized counts of sheep/goat and cattle bones are 72.7 and 26.7, not that different from the size class proportions. Some 40.5 percent of the 42 identified sheep or goat bones are sheep, the ratio being about 1.5 goat to 1 sheep. About 13.3 percent of the mammal bone from VIIA is rodent gnawed, the highest proportions being in the occupation-and-fill deposits with 17.6 (interior) and 27.5 (exterior) percent. A somewhat lower 12.6 percent of bones from room fill deposits are gnawed as well.

In conclusion, the period **VII** material comes from loci of all the various context categories except "walls" but with very few specimens (16) from "rubble". The most bones come from "occupation and fill out and associated" loci (1450 mammal) followed by "midden" (1290 mammal), the latter largely from one partly screened deposit in VIIB.5-3. Discussion of variation between the various context types and the possible significance of same are be discussed in Chapter 8. We pass now to period VI by way of some Area CDE loci that are classed as VIIA-VIB.2.

7.5.3. Yahya Period VI

(Tables 7.7-7.9 summarized in Tables 7.21-7.24 and 7.37-7.40 Figures 7.10-7.11)

Yahya VI is the second-earliest period defined at the site. Estimated dates for sub-period VIB are 3900-3800 bc (5730 half-life, uncalibrated; calibrated: c. 4600-4500 BC). Sub-period VIA can, in many respects, considered integral to the building of the sub-period VC architecture; together they can be dated to c. 3800-3700 bc (4500-4300 BC). The period is uniquely characterized by a series of elaborate terracing devices built to extend the edge of the mound out to the south. Some of the retaining walls began to be constructed and rubble fill used during sub-period VIB, a time at which there was also occupation in the area. Full elaboration of the leveling complex took place during what has been defined as non-occupational sub-period VIA, the resulting structures forming the foundation for the Yahya VC architectural complex. Masses of rubble composed of fist-sized cobbles, coarse ware sherds, and bones

were excavated from between, around, and even under mud-brick retaining walls many of which were laid out in cellular fashion (Figure 7.11). Little fine sediment was found in this rubble, perhaps because it had become washed out by millennia of rains, the rubble deposits serving much like a series of dry-wells. Resulting leaching of the organic fraction made the bones from these deposits very brittle. Given the grinding activity that would have occurred as the rocks and sherds settled and shifted, it is remarkable that so much spongy bone from these loci survived intact. As it is, however, much bone (up to 10 percent by weight) came to the analyst's worktable as powder or fragments smashed beyond hope even of classification.

A particularly important feature of the Yahya VI faunal collection is that 62 percent of the mammal remains came from the rubble deposits. This is significant because the rubble was almost certainly brought in from elsewhere on the site, whether from the middens or throw zones of contemporary settlements or from earlier deposits dug up in the process of, for example, excavating brick-pits. The ceramics of VI, including those from the rubble, include lighter, less dense slab-built coarse wares than in period VII as well as the first monochrome and bichrome painted sherds. These differences would seem to suggest that we are dealing with a valid chronological distinction as well a clear architectural change. The latter is evident also in the domestic structures with their raised interior corner hearths and different construction technique.

A puzzle remains the source for the fist-sized cobbles, many of which were cracked and spalled. This condition perhaps indicates that

they were heated at one time. If so, the stones could have been used in an indirect cooking process, i.e., heated in a hearth and then added to containers to cook a stew. This method of cooking has also been suggested for contemporary levels at Mehrgarh in Pakistani Baluchistan (Jarrige, 1986; to judge from personal observation, cooking pots, with signs of smudging on the exterior indicating that they were place over a fire, are not found at Yahya until the earliest architectural configuration of Yahya IVB). The cobbles themselves would have to have come from gravel deposits some distance from Yahya. After use they would have been discarded in a midden area from which they could have been collected along with the sherds and bones for deposit in the terracing system. If such midden deposits were sloping (as on the side of the mound), the cobbles together with larger bones and sherds would tend to cascade to the base of the talus. One could perhaps test such a hypothesis by comparing bone weights of specimens from the rubble with those from other types of deposits. Because of the leaching and pre- and post-depositional breakage in situ and during excavation and handling, however, it is difficult to justify using bone weights in such a fashion. The relative dearth of material from most other types of contexts in Period VI also makes comparison difficult. Only in phase VIB.2 have midden deposits yielded sufficient bone to permit comparison with rubble deposits from the same phase (see below).

In sum, because of depositional and post-depositional activities, we can expect the faunal material from the rubble deposits to have count/weight, species, modification, and even element distribution profiles different from those of primary and secondary deposits. To the

extent that it seems reasonable to do so, this hypothesis will be tested below in Chapter 8. The remainder of this sub-section will be principally descriptive.

As promised at the end of Section 7.5.2, we must first present the material from periods VI and VII that cannot unequivocally be assigned to one or the other. From **VIIA-VIB.2** UNDIFFERENTIATED FILL OUT loci (1931, 1933, 1934) in Area CDE come 292 specimens. These belong to VIIA, VIB.2, or both, the bricky deposits being a continuation of those described for VIIB.2-VIIA. As from those latter, there are a number of specimens from uncommon or "exotic" taxa including 6 bones from Equus hemionus (joining metatarsal III and IV, a rib, a first phalanx, and 2 lower deciduous cheekteeth), 3 from Testudo, 1 from gazelle (scapula), 2 pieces probably coming from the same left carpometacarpus of a heron (probably Ardea cinerea), and the complete humerus of a francolin or chukar. Two bone tools were also identified (1 made from a medium, 1 from a large mammal long bone fragment) as well as a Bos ulna with polish on it. Overall, the bones are somewhat heavier than those in the earlier bricky fill from Area CDE, this holding true for both medium and large mammal bones. The proportion of large mammal bones is substantially higher, however, being 41.0 (compared to 28.7) percent. There are also considerably more unidentified smashed fragments (by weight: 310 vs. 210 g) even though the counted fraction of the collection is smaller.

The other group of material from the column headed "VIIA-VIB/A" in the count/weight, species, and modification tables comes from any or all of **VIIA-VIA**, being bricky fill along the north side of Area C below

the Yahya VC complex. Since long bone fragments were extracted from these loci (704*, 719*, 728*, 747, 748*, 792*, 795*, 843*) for radiocarbon analysis (see above), the 117 specimens tabulated are not all of the bones recovered. This group of material is remarkable only in its proportion of large mammal remains (46.2 %) that is more than paralleled by the percentage of cattle specimens based on standardized counts (54.5%). There are also single gazelle (scapula) and pig (tooth) bones from these loci.

Turning now to Yahya VI proper, phase **VIB.2** contexts yielded nearly half of the faunal specimens from this period (1321/3013 or 43.8%). Construction and deposition activities for the phase include the filling of depressions with rubble, various episodes of building retaining walls, laying brick pavements, building and habitation of domestic architecture in Areas D and CDE, and deposition of ashy midden debris in a large depression in the southeast corner of Area C (Figure 7.10). The sequence of these events is discussed by Beale (1986:127-130). Nearly identical numbers of bones came from RUBBLE (loci 779, 1925, 1926, 1930, 1932: 582 specimens) and MIDDEN (loci 159 and 171: 580 specimens) deposits, the average weights for medium and large mammal bones being nearly the same as well. Note, however, that there is nearly 1000 g of unidentified smashed bone from the rubble and only 45 g from the midden. Not surprisingly, the proportion of large mammal bones by count is higher in the rubble deposits (40.2%) than in those from the ashy midden (21.2%), the percentage of cattle remains from the former also being almost twice that from the latter (31.9% vs. 16.9%).

Both the rubble and midden contexts yielded numbers of "exotic" specimens. From the rubble (mostly from Area CDE) were identified 2 gazelle bones (a tibia shaft and a distal metatarsal), 4 Equus hemionus specimens (2 lower cheekteeth and 2 first phalanges), 3 Testudo fragments, and 2 bird bones. One of these last is a splinter of a carpo-metacarpus from a raven (Corvus corax), the other a tarso-metatarsus from a large male domestic chicken (Gallus gallus domesticus). Unfortunately the latter is almost surely intrusive, being bleached white like the camel bone also from Area CDE (VIIB.2-VIIA). Finally, there is a shaped tool made on a medium mammal bone.

From the midden come 6 gazelle bones (2 horncores, a mandible fragment, distal scapula, humerus shaft, and tibia shaft), 3 pig specimens (a tooth and 2 astragali), and 4 Testudo fragments. There are also a split and polished large mammal bone tool, a shaped and polished cattle scapula fragment, and a polished sheep/goat scapula fragment. Of note from these deposits is the high proportion of the bones that show signs of rodent gnawing (17.9%).

The remainder of the specimens from phase VIB.2 come from UNDIFFERENTIATED FILL OUT deposits (loci 169, 785, 794, 803, 814, 821, 854) in Area C (119 bones) and PLATFORM (OR LEVELING) loci (708, 766, 784, 806) in the same area (40 specimens). From the former are 2 pig bones (proximal radius and articulating ulna) and 2 Testudo fragments. From the latter comes a single equid tooth fragment. Large mammal remains make up 31.6 percent of the collection from the fill deposits, a proportion midway between that for the midden and the rubble, but the average bone weights are higher than for either of those

two context types. Little can meaningfully be said about the material from the platforming because of the small size of the collection.

From phase **VIB.2 or VIB.1** come 13 specimens from WALLS in Area CDE (locus 1927), 11 bones from PLATFORM (OR LEVELING) in Area D (locus 717), and 140 pieces from MIXED (OR OTHER) fill in Area CDE (locus 1923). Single Equus hemionus specimens come from the mixed fill (distal metatarsal) and the platforming (first phalanx). A gazelle horncore comes from the platforming. For all of these loci taken together, the percentages of large mammal bone (47.6%) and of identified cattle (47.1%) elements are high.

Yahya **VIB.1** construction involved only minor additions to the site layout as defined in VIB.2, including principally some new and additions to existing retaining walls, and two stages of small rooms (? domestic structures) in the southeast corner of Area C and in CDE (Figure 7.10). The total number of specimens from contexts attributable to this phase is hardly higher than that from VIB.2-1 loci (183 vs. 164 bones, all mammal). Some 30 of these come from RUBBLE (locus 167) around the scruffy architecture in the southeast corner of Area C, another 23 from OCCUPATION IN deposits in that architecture (locus 727), and 130 from UNDIFFERENTIATED FILL OUT throughout the excavated zone (Areas BW, CW, C, and CDE: loci 746, 820, 825, 851, 1349, 1377, 1914, 1919, 1920). From this last came an equid sphenoid fragment.

The values in the count/weight table show a relatively high average specimen weight for large mammal bones from all contexts but especially from the occupational locus. This is due to the presence in that locus of 5 cattle mandibles with teeth, all of which show clear signs of

having been shaped and used as tools. It is not possible to know exactly what the finished tools looked like because of the degree to which each specimen was broken during excavation and handling, but each appears to have been grasped in the area of the diastema which has considerable polish. The ascending ramus is broken off immediately behind the third molar or just below the articular process, and that area of the mandible also shows signs of polish and striations in varying degrees. It seems possible that these bones were used as scrapers or "shovels" in construction or maintenance activities although concrete suggestions must await a use-wear study. A cattle mandible with teeth bearing polish was also recorded from the fill deposits of this phase. Another mandible tool was noted for Yahya VIIA and others will be described for VA. The ones from VIB.1, however, are the only ones with teeth still in place in the jaw, although "utilized" third molars were noted in the VIIA deposit.

In addition to the polished mandible from the fill deposits of Yahya VIB.1, there are a polished rib fragment and a shaped and polished bone tool made from a fragment of a large mammal long bone. The proportion of large mammal bones in these fill contexts is 33.1 percent and of cattle is 34.3 percent. The relatively high average specimen weight for large mammal bones has already been noted.

For Yahya **VIB** overall, the proportion of large mammal specimens varies from 21.2 percent in midden deposits to 41.7 percent in rubble deposits, it being 32.4 percent in the fill, the only other discrete context type with more than 100 specimens. The proportion of medium mammal varies inversely. These trends are not quite paralleled by those

for cattle, the highest proportion being in the fill (34.7%) followed closely by the rubble (32.8%), the midden having about half those proportions (16.9%). The figures for the total collection from VIB are 33.4 percent large mammal and 28.9 percent cattle (65.7% medium mammal and 67.1% sheep/goat). These summary proportions are placed into context in Chapter 8.

A grand total of 63 specimens come from **VIB.1-VIA** contexts, 3 from WALLS (locus 868 in Area C), 34 from MIXED (OR OTHER) deposits, including rubble (locus 1921, Area CDE), and 26 from PLATFORM OR LEVELING (loci 3769, 3371, 3772 in Area A, not connected stratigraphically to the major area of excavation and therefore only provisionally assigned to this timeframe). The only exotic specimen is a single equid bone (femur shaft) from the mixed material.

Almost all of the bones from Yahya VIA come from the rubble fill in and around the system of retaining walls built during this non-occupational sub-phase (Figure 7.11). Of the 28 specimens not coming from rubble, 16 are from WALLS in Areas C and CDE (loci 812, 1928) and the remaining 12 are from UNDIFFERENTIATED FILL OUT in Area D (locus 724, under the rubble fill that underlies the VC rooms). There is nothing exceptional about this material and it will not be discussed further.

The rubble of sub-period VIA can be divided into three parts based on chronological and locational considerations. "Rubble 4" and "rubble 6" (the column labeled "VIA early") were deposited with the retaining walls in Areas BW and CW and in the northwest part of Area C (Figure 7.11). This "upper" leveling is just that, its top being some 1.2 m

above the top of the "lower" leveling to the southeast in Areas C, D, and CDE (the column labeled "VIA middle" and including "rubble 14" and "rubble 26"). The architecture of Yahya VC, which perhaps should be considered integral to the VIA leveling complex in the sense that it was the last episode of the construction, abuts this "upper" leveling and lies on a final layer of rubble (the column labeled "VIA late") that was used to fill in depressions left after the "lower" leveling was put it place. The stratigraphic relationships between the "upper" and "lower" leveling are not clear due to the unfortunate presence of a later large pit at the only point where the two complexes draw near to each other. It seems likely, however, that they were more or less contemporary and the difference implied by my use of the terms of "early" and "middle" in labeling the columns in the count/weight, species, and modification tables should not be taken too literally. Over the "upper" leveling there is, in places, some deposit containing period V pottery. Mostly, however, the area was cleared down to the top of the VIA complex when the monumental architecture of Yahya IVC was constructed.

There are 172 specimens from **VIA early** RUBBLE (loci 709, 714, 721, 738, 753, 773, 796, 802, 810, 853, 858, 865, 1346, 1350), all from Areas C and CW. Most of the "rubble 4" in Areas BW and CW was never removed from around the retaining walls, only the top of the complex being cleared. The assemblage of faunal remains available contains 44.8 percent large mammal bones and 38.5 percent cattle elements. There are 2 gazelle bones (humerus shaft and proximal radius) and 4 equid bones (single upper cheektooth, distal radius, tarsal, and second phalanx) as well as two polished specimens (a large mammal long bone fragment and a

medium mammal rib fragment).

The **VIA middle** RUBBLE (loci 718, 729, 805, 1915, 1916, 1918, 1922, 1924) from Areas C and D ("rubble 14") and CDE ("rubble 26") yielded 808 specimens including 1 fragment from Testudo. The proportions here are 38.0 percent large mammal and 47.6 percent cattle (a reversal of the figures from the "early" rubble). There are single gazelle and pig bones (scapula and acetabulum, respectively) as well as 2 equid specimens (distal metatarsal and first phalanx). Three bones appear to have been used as tools. Of these, one is made of the shaft of a sheep/goat tibia, another on a goat tibia, and the third on a medium mammal long bone shaft. The shaft part of a cattle distal metatarsal has an area of polish on it.

Finally, from the **VIA late** RUBBLE (loci 698*, 699*, 705*, 720, 731, 745*, 848*, 849*, 856*, 1917) come 274 bones. The count would be higher if shaft fragments had not been removed for radiocarbon dating (see discussion above). Here, 50.4 percent of the specimens are large mammal and 50 percent cattle. There are 3 gazelle bones (mandible with teeth, proximal metacarpal, and astragalus), 1 equid specimen (proximal metacarpal), 1 dog mandible, 1 porcupine (Hystrix) tooth, and 1 vertebra probably from a jungle cat (Felis chaus). Three tools include a medium mammal long bone fragment shaped to a point, a polished and striated large mammal rib, and a shaped large mammal long bone. There is also a sheep/goat scapula with an area of polish on it.

The "late" rubble specimens are, on average, somewhat heavier than those from the other VIA rubble assemblages but this is probably due to the removal of the shaft fragmets before counts and weights were taken.

The 1385 g of unclassified smashed fragments from the "middle" rubble should also be noted in contrast to the situations in the other two rubble assemblages. Discussion of the columns headed **VIA Total** and **VI Total** would add little at this point, consideration of the latter being deferred to Chapter 8. Collections that could have come from either period VI or period V (or both, mixed) are dealt with in the next section.

7.5.4. Yahya Period V

(Tables 7.7-7.9 summarized in Table 7.21-7.24 and 7.41-7.44; Figures 7.12-7.14)

Period V, the third-earliest major temporal division defined at Tepe Yahya, can be placed between about 3800 and 3300 bc (including VIA; 5730 half-life, uncalibrated; calibrated: c. 4500-3900 BC). On the south side of the mound, three successive and distinct architectural complexes were defined: C, B, and A, all quite different in their configurations, but all clearly "domestic" or "residential" in their nature. On the floor of the VC complex (room/courtyard 1) three coarseware jars were found more or less intact and in situ (Figure 7.12). Little else that could be considered primary or secondary trash was recovered from that complex. Only in the fill of the intentionally leveled VC rooms were recovered the first of the "Yahya Black-on-Buff Ware" sherds particularly characteristic of the ceramic assemblage of VB, these to be largely replaced by pottery in the "Yahya Black-on-Red Ware" style during VA. In many ways it seems more logical to consider VI and VC together as a period, followed by what is known as VB, then VA, and then

IVC, each as full periods instead of sub-periods as now characterized. The present terminology is enshrined in the literature, however, and it seems best not to change it, although, as noted above, it is necessary to carefully distinguish between occupational deposits contemporary with the use of a complex and fill deposits that are later.

Coming from the upper fill of the VC rooms (=VB platforming?) that, when excavated in the north and west of Area C, was not differentiated from VIB.1 platforming are 111 specimens (**VIA/B-VC** PLATFORM OR LEVELING: loci 712, 715, 722, 761, 776, 782, 789, 797*, 799*, 819, 846, 861). Among these are 2 pig ulna shafts, a shaped and polished large mammal bone fragment, and a large mammal rib fragment with the spongy bone scraped out and some signs of "retouch" (possibly a preform). Some 13.5 percent of the specimens are rodent gnawed. Average specimen weight is low, but the significance of this feature is difficult to assess because some specimens were removed for dating before analysis (see above). About 25 percent of the bones come from large mammals, 21 percent from cattle. In contrast are the 10 relatively heavy large mammal bones from a locus in the northern part of Area D (VIA-VC UNDIFFERENTIATED FILL OUT: locus 859). No medium mammal remains are in the collection from that locus.

From the 19-room residential complex of **VC**, only 390 specimens are available for analysis, most from Area C, but some from Areas B, CW, CDE, and D (Figure 7.12). Of these, none come from clear occupational contexts, only 160 from "occupation and fill", and 27 from "midden" deposits. As with the pottery, therefore, most of the "VC" bones could have been deposited after occupation of the complex had ended. There

are also 21 specimens from WALLS or wall melt (Area CDE, locus 1910) of which one is a canine tooth from a fox (Vulpes sp.). If indeed these bones came from the bricks or mortar, they would be earlier than the occupation of the VC complex. The same is true of some 12 specimens from a foundation trench identified in Area D (locus 800, classed as MIXED OR OTHER in the tables).

Since each of the various context groups defined for VC (cells on the count/weight table) contains fewer than 100 specimens, comparisons between them are not likely to reveal much significant, as opposed to chance, variation. Thus, OCCUPATION & FILL IN loci (700*, 756*, 758, 759, 769*, 801*, 808, 844*, 872, 873*, 874* in Area C and 1912 in Area CDE) provide 86 mammal bones, ROOM FILL IN & ASSOCIATED deposits (Area C loci 740 and 760) yielded 16 mammal bones, OCCUPATION & FILL OUT & ASSOCIATED material includes 74 mammal bones (from loci 768 and 811 in Area C; loci 322, 1369, and 1371 in Area B and locus 1913 in Area CDE), UNDIFFERENTIATED FILL OUT specimens comprise 59 mammal and 1 Testudo (from Area B loci 311, 314), and the PLATFORM OR LEVELING bones include 1 bird (tarso-metatarsus of (?)Francolinus francolinus) and 93 mammal fragments (from loci 755, 770, 791, 807, 857 in Area C and 1306 and 1308 in Area CW). From all of VC there is also only a single piece of obviously worked or utilized bone, this being a cattle lower molar from the ashy MIDDEN deposits (27 specimens from loci 1370, 1372).

Of particular note from the VC assemblages are 8 bones from porcupine (Hystrix indica). All of these specimens, including a thoracic vertebra, 2 ribs, a distal humerus, proximal radius, distal femur, proximal tibia, and distal tibia, come from room/courtyard 1

(occupation & fill in) and probably from the same animal. Since a wide variety of skeletal parts are present, it is possible that the animal was introduced into the deposit in a more or less intact state. If so, however, it is necessary to account for the disappearance of most of the skeleton either through the agency of dogs or rodents (traces for neither of which are present on the surviving specimens) or through the fact that sediment from these deposits was not screened. Another possibility, of course, is that the bones are human food debris, and it is only because we are dealing with a rarely represented taxon of small size that we are able to suggest that the bones come from the same animal and that the "consumption package" involved the whole instead of a portion of the animal. (The smaller the animal, the less likely it is to be apportioned between different consuming groups, such division providing a predepositional mechanism for bone dispersal.) Except for some partial skeletons of small rodents and shrews, however, this porcupine (if it is indeed one animal) is the only "exotic" mammal or bird to occur with so many bones in a single context. In contrast, from another room in the VC complex (room 16, occupation & fill in) there comes the lone proximal radius of a hare (<u>Lepus capensis</u>), and the only other porcupine specimens noted from Tepe Yahya so far are single teeth from VIA and VB.

Other bones from mammals rarely represented in VC loci include the following: a gazelle proximal humerus and 3 pig bones (proximal radius and 2 proximal ulna fragments) from "occupation & fill in" deposits, a gazelle horncore and equid proximal metapodial fragment from "occupation & fill out & associated" loci, an equid tooth from the "midden"

deposits, a gazelle humerus shaft from "room fill in & associated" sediments, and 3 gazelle bones from the "platforming" (a tooth, proximal metacarpus, and proximal femur).

Overall in VC, there is a moderately high incidence of rodent gnawing (12.6%). The proportion of large mammal remains is 31.2 percent and of cattle bones 20.4 percent, this discrepency due in part to the relatively large number of remains from rarer taxa (gazelle, equid, porcupine, hare) that are included in the totals in the the species table. Excluding those specimens, the percentage for cattle rises to 24.1, the continuing difference due to the presence of relatively greater numbers of large mammal bones or lesser numbers of medium mammal bones that are not counted in the species tables. Even with the discrepency, the overall proportions for large mammal and cattle bones are considerably lower than those for period VI, being closer to those for period VII. This matter will be discussed further in Chapter 8.

After the VC complex was abandoned, the walls were knocked down, the complex filled in, and a one-brick-thick paving was put over the top as a foundation for the **VB** occupation that is known to us from exposures in Areas C and B (Figure 7.13). Unlike the situation in VC where the excavated area was largely covered by architecture, VB building remains occur only in the south and west portions of the exposure, most of Area B covered by what was evidently a courtyard (court 16) and a midden deposit (area 15). All except 60 of the 506 specimens from this sub-period come from these two areas, 398 from carefully excavated occupational deposits in the courtyard alone (OCCUPATION OUT & ASSOCIATED: loci 312, 315-319, 321, 1341-1345, 1347,

1348, 1351-1354, 1356, 1358, 1360, 1361, 1365, 1367). These deposits are not all strictly contemporary in the sense that they are a series of stratified levels clearly having some time depth, but for our purposes they are grouped together. From them come a bird humerus (from a francolin or partridge), 3 gazelle bones (proximal radius and femur and tibia shafts), a pig tooth, an equid rib, and 3 Canis specimens including 2 teeth and a tibia shaft fragment, all probably from dog. There are also 2 bone tools, 1 made of the proximal ulna of a sheep, the other of a medium mammal bone fragment. Overall, 30.5 percent of the bones come from large mammals but only 20.7 percent from cattle, proportions and discrepency similar to those noted for VC. Only 8.3 percent of the bones are rodent gnawed, however. Average bone weight is quite low (6.2 g), although not so low as in the interior occupation and fill deposits.

Of the remaining 110 specimens from VB, 11 come from WALLS (locus 710, wall 5 in Area C), 48 from OCCUPATION & FILL IN (loci 743 and 772 from room 1, loci 735, 741, 809, 834 from room 2, locus 1362 from room 11 that also included a human burial), 48 from the MIDDEN (loci 1355, 1357, 1359, 1366), and 1 from UNDIFFERENTIATED FILL OUT (locus 1368). Of note are a gazelle metatarsal shaft frament and single porcupine tooth from the "occupation & fill in" deposits and a male gazelle horncore and pig pelvis fragment from the midden in depression 15. Although the assemblages are small, it is possible to note that the midden yielded a high proportion of large mammal bones (45.8%)and that the bones from that context are rather heavy on average compared to those from other VB contexts. Exactly the opposite is case for the

"occupation & fill in" material which is exceptionally light.

The last part of period V at Yahya is subdivided into two phases on the south side of the mound, VA.2 and VA.1, neither of which was found to have much well-preserved architecture. There are, however, 4 well-preserved architectural levels on the north side of the tepe, this perhaps indicating a rather longer duration for the sub-period as a whole than for VB or VC, suggested dates being 3600-3300 bc (5730 half-life) or 4200-3900 BC. As noted previously, the characteristic ceramics of this sub-period are a black-on-red ware in contrast to the black-on-buff ware of VB.

All the bone from **VA.2** comes from court 5 in Area B, 299 specimens from OCCUPATION OUT & ASSOCIATED deposits (loci 313, 1322-1325, 1327, 1329, 1331-1334, 1336, 1338, 1339) and 30 from an OCCUPATION & FILL OUT & ASSOCIATED locus (323). "Exotic" specimens include a gazelle skull fragment, a dog tooth, and a pointed and polished medium mammal bone fragment. Overall, the proportion of large mammal bones is 27.1 percent and of cattle only 12.0 percent continuing the trends noted for VC and VB. The average specimen is very light in VA.2 (4.5 g), this reflecting particularly light (and small) large mammal specimens. Some 10.9 percent of the specimens show signs of rodent gnawing.

The material from **VA.1** can basically be divided into two parts: that from court 16 in Area B and that from a furnace or kiln in Area CDE. No faunal material was collected from the architecture excavated in Area C in 1968. Some 27 bones are from OCCUPATION OUT & ASSOCIATED deposits (loci 329, 332, 333, 385), 136 specimens from OCCUPATION & FILL

OUT & ASSOCIATED (loci 1314-1318, 1320, 1321, 1335, 1337), and 50 bones from UNDIFFERENTIATED FILL OUT (loci 310, 331). All of this material comes from on or in the fill above the surfaces of the courtyard area. In addition, there are 7 specimens from some RUBBLE deposits between two walls in the southeast corner of Area B (locus 1326).

Specimens of note include a humerus shaft identified as coming from Francolinus francolinus, 2 gazelle bones (thoracic vertebra and distal humerus), and an equid tooth all from "occupation & fill out & associated" deposits and a Canis first phalanx from the rubble. From the former (courtyard) material, 23.6 percent of the 212 mammal specimens come from large animals and 9.8 percent (5/51) from cattle, the trends defined above again continuing with fewer large mammal bones and an even lower proportion of cattle. A high 17.0 percent of the specimens from the courtyard area were rodent chewed. Overall the specimens are considerably heavier than those of VB, particularly in the upper fill deposits.

Turning now to the furnace or kiln (Figure 7.14), it is necessary to quote a passage from the report of Beale (1986: 151):

> There is no certainty that Kiln 1 dates to VA.1, but it is described here because there is a good possibility that it dates to this phase. It may, however, belong instead to VA.2 or even VB. The problem is that most of the kiln lies right at the present surface of the mound, so that it is difficult to date the kiln by its stratigraphic position or by associated material.

Thus the 221 faunal specimens from this context (MIXED OR OTHER: loci

1901-1909) must be treated with due respect for the uncertainties involved.

Of particular interest are the high proportion of burned material (21.4%) and the 10 polished specimens or tools, 7 of which are cattle mandibles, none with any teeth remaining in place. Similar specimens (some with teeth) were described from earlier deposits, notably from VIB.1. As there, these mandibles are most heavily polished in the diastema area although here polish extends over the whole fragment in at least two instances. One suggestion for their use is that they served as a kind of "rake" or "shovel" to clean ashes out of the specimen or to stir the fire. There are, however, an additional 2 mandibles that are burned but have no apparent signs of polish and of the polished specimens, 3 are not obviously burned. Added to these are a relatively large number of cattle pelvis fragments (4), none polished, all charred and all including the complete acetabulum but not much of the blade areas of the bone. A brief examination of these VA.1 mandibles by Nerissa Russell (who has considerable background in the analysis of bone tools) yielded the observation that the two most highly polished specimens appear to have been used to work soft materials such as hides (personal communication, 8/13/86). Further analysis is required, however.

Additional polished pieces include a sheep/goat scapula that is also scratched and battered but not burned and a large mammal bone that is also shaved down but again not burned. The lone bone classified as a "tool" is a gazelle matatarsal that is grooved longitudinally on both the dorsal and plantar sides. There is also a gazelle scapula, a skull

fragment and tibia fragment from pig, an equid first phalanx, and a _Testudo_ peripheral.

The proportion of large mammal bones from the kiln area is 25.9 percent, a figure not out of line for period V. The proportion of cattle, however, is 19.3 percent, somewhat higher than otherwise found in VA and closer to that of VB. Some 10.5 percent of the bones are rodent gnawed, but there are very few specimens that are both burned and gnawed. Although many specimens are burned, their average weight is relatively high (12.9 g), this all due to the heaviness of the large mammal bones (average weight of 40.4 g), particularly the mandible and pelvis pieces. Medium mammal fragments are, if anything, slightly less heavy than they generally are in period V (3.2 g average).

The data from VA.2 and VA.1 are grouped in the **VA Total** column, use of which will be made in Chapter 8. Discussion of the individual entries does not add to what has been noted above for the phases separately. Overall, the proportion of large mammal remains is 25.5 percent and of cattle 13.4 percent. Some 12.6 percent of the collection shows signs of rodent gnawing, a proportion identical to that for VC material and somewhat higher than that for VB.

Finally from period V, there is the material that is assigned to more than a single sub-period or phase. In the count/weight, species, and modification tables, these assemblages are summarized in the column labeled **VC/A,C/B,B/A.** The 57 bones from RUBBLE come from deposits just below the surface in Area C that could belong to any or all of the sub-periods of period V (loci 726, 736, 752, 863, 864). Included are a gazelle skull fragment and a bone tool made on a medium mammal scapula

fragment. Some 39 specimens come from a single Area B OCCUPATION OUT & ASSOCIATED excavation unit (locus 320) that is a series of surfaces assigned to terminal VC and early VB. This material could perhaps best be grouped with the VB occupation material. There is a pig tibia shaft fragment in this small collection. Last, from UNDIFFERENTIATED FILL OUT deposits in Areas BW (locus 1363) and C (loci 702, 716, 733, 742, 774, 777, 788) come 122 specimens that could belong to VB or VA or both. Some 21.3 percent of the bones come from large mammal, 14.3 percent from cattle, proportions most similar to the overall figures from VA.1. There are no particularly noteworthy specimens in this assemblage.

Overall in period V, there is a declining proportion of large mammal and cattle bones, a trend that finds its ultimate expression in the IVC assemblage discussed in the next section. The **V Total** column, of course, obscures this trend, but the relatively few specimens recovered from period V loci (1879 mammal) make looking at grouped data necessary for many purposes.

7.5.5. Yahya Sub-Period IVC

(Tables 7.10-7.12 summarized in Tables 7.25-7.28 and 7.45-7.56; Figure 7.15)

Following what has been defined as Yahya VA, there is an apparent gap in the occupation of the mound. Whether this gap is real or merely a function of the fact that the top of the mound was leveled for the Yahya IVC complex is not entirely clear although significant shifts in settlement accompanying a major depopulation of the whole Rud-i Gushk drainage did take place at the end of VA. The area was certainly not

deserted during the period of time between VA and IVC, however, as there are sherd scatters of the intervening "Iblis IV/V period" in both the Soghun and Shah Maran-Daulatabad basins (Prickett 1986). In any event, with the architectural complex of Yahya IVC, we have a qualitatively different kind of occupation than had previously occurred on the mound. The whole scale of the elaborately planned structure (Figure 7.15) is different (Beale and Carter 1983: 81), and while domestic activities in the form of cooking still occurred, the exterior kitchen area is clearly separated from rooms that appear to have had both administrative and storage functions. Radiocarbon determinations suggest a date of between 2850 and 2750 bc (5730 half-life) that calibrates to between 3400 and 3300 BC (see Table 2.1), somewhat earlier than the traditional date for the Proto-Elamite / Jamdat Nasr horizon to which it can be assigned on the basis of incised tablets, cylinder sealings, and pottery. The question of precise dating is not particularly relevant here, however, and will not be pursued.

Definitive study of the Yahya IVC deposits has been carried out by Dan Potts (1980, in preparation). He has divided this sub-period into two phases, the earlier of which (IVC.2) includes the monumental architecture with associated habitation surfaces. Materials assigned to this phase come principally from primary and secondary trash deposits that accumulated before the structure was abandoned. Multiple occupation surfaces separated by varying thickness of habitation debris were present in most rooms, corridors, and courtyard areas. These were recognized and excavated in discrete units principally in Area A during the 1975 season (exterior areas A, B, C, D, E and room 1; see Figure

7.15). In addition, most of this 1975 material was dry screened through quarter-inch hardware cloth, a procedure that standardized recovery of all classes of archaeological remains.

Yahya IVC.1, as defined by Potts (1980, in preparation), includes principally the upper fill of rooms and courtyard areas together with brick fall, "buttresses", and unsubstantial architecture found to the south and west of the main IVC structure (exterior areas F and G in Areas BW and CW; see Figure 7.15). Most of these deposits seem to have accumulated after abandonment of the principal architectural complex and during a period of time when the walls were decaying and the room areas were being used for disposal of trash. One peculiar feature of the IVC complex, however, is that while few of the walls have survived to heights of more than 60 cm, the upper fill of the rooms was remarkably free of bricky debris. This situation stands in marked contrast to areas outside of the complex where excavation turned up a maze of alligned bricks, poorly built walls, and brickbats. A possible explanation for these circumstances is that the walls were dismantled following abandonment of the building and the bricks reused in other areas of the site including what were formerly open spaces to the south and west of the complex. In any event, a distinction can be made between these secondary and rather amorphous trashy deposits from within the confines of the complex and the mixture of secondary trash and tertiary bricky fill from outside. This distinction is reflected in the count/weight, species, and modification tables.

Another feature reflected in the tables is whether material came from screened or unscreened excavation units. Furthermore, screened

material is partitioned into that fraction that was collected by the workers before screening and that fraction that was collected in the screen. Thus, in the last three columns of the tables, it can be seen that 58.3 percent of the total of 4994 mammal bones from IVC were recovered in the screen, but that the average weight of these specimens was only 1.4 g as opposed to 7.5 g for bones not recovered in the screens. The proportion of large mammal bones recovered in the screens is 4.9 percent, not in the screens 10.4 percent. The comparable percentages for cattle in the species table are 1.4 and 8.2 percent. Likewise the incidence of rodent gnawing, carnivore gnawing, and cut marks is higher on unscreened material although the opposite is true for burned specimens perhaps because burning is more easily recognized on specimens no matter what the size. Finally, however, note that 54.5 percent of the bird and reptile bones (18/33) were recovered in screens, this remarkably close to the 58.3 percent noted above for the mammal bone. In other words, there does not seem to have been a marked selection against these classes of material in the unscreened fraction. The same cannot be said for the rodent and small mammal material which, although as yet unstudied, clearly seems to be much more common in the screened fraction.

The proportions provided by the unscreened portion of the IVC material are probably those most comparable to proportions provided by the rest of the Yahya material almost none of which was screened. That is the reason that they are reported in the tables. The best statistics for IVC.2, however, are provided by combining the screened and unscreened fractions even though there are some unscreened assemblages

with no screened counterparts. These latter will be identified as we discuss the tables in detail but they represent only a small fraction of the material recovered from that phase. What is important to note here is that the true effect of screening in IVC.2 is determined not by comparing statistics between material gathered within or without the screen, but between that gathered without and the **sum** of that gathered within and without. Thus the statistics quoted above (advisedly) are somewhat misleading.

Yahya **IVC.2 interior** contexts yielded a total of 862 specimens, 464 recovered from the screen, 398 gathered without the use of screens. A total of 149 bones came from screened OCCUPATION IN loci (Room 1: 3710, 3722, 3728, 3743 providing the unscreened fraction of 100 specimens, 3709 the screened fraction of 49 bones) while 106 specimens came from unscreened OCCUPATION IN loci with no screened counterpart (room 6: 295, 327, 330; room 1: 3721, 3736). Of note from the occupation surfaces of room 1 are 2 Testudo fragments and a proximal goat tibia from which some bone flakes had been removed perhaps by tapping for marrow or perhaps as the first stages of tool manufacture.

During the 1971 cleaning of that portion of room 5 excavated during the 1970 season (from which there are no bones), there was found the proximal part of the shaft of a right ulna of a very large bird, possibly a mute swan (cf. Cygnus olor). The shaft toward the distal end had been beveled and the whole bone bears obvious polish as well as numerous small striations. This specimen is not included in the totals of the IVC species table but is illustrated in Plate I.

From OCCUPATION & FILL IN deposits of IV.2 there are only 29 specimens from unscreened loci with no screened counterpart (room 5: 289, room 1b hearth area: 290, room 4: 294) and 578 specimens from screened loci (room 1: 3704 providing the screened fraction of 415 bones, 3711 and 3732 the unscreened fraction of 163). Again from room 1 come a Testudo humerus and 5 gazelle bones (fragments of a male horncore, skull, scapula, femur shaft, and distal tibia), as well as 4 bird bones including a phalanx from an unidentified medium/large bird and 3 fragments from francolin or partridge (humerus shaft and 2 tibiotarsus shafts).

For the not screened fraction of this interior IVC.2 material (mostly from room 1), the average weight is a respectable 9.9 g even though the proportion of large mammal material by count is only 12.4 percent and 14.4 percent for cattle. The large mammal bones, however, are remarkably heavy (average = 46.1 g), particularly given the fact that they come from interior loci, although the heaviest specimens do come from the upper deposits and not from within the floors themselves. If one adds the screened and unscreened fractions together, the proportion of large mammal drops to 9.6 percent, cattle to 11 percent, and average weight to 5.2 g. Noteworthy is the fact that a relatively high percentage of bones bear cut marks: 7.1 percent of the unscreened fraction and 3.9 percent of the total. Overall, many more bones from IVC reveal signs of butchering than from the previous periods, a phenomenon that will be considered in greater detail in Chapter 8.

Yahya **IVC.2 exterior areas F & G** designate those loci to the west of the main complex. None of this material was screened, all being in

Areas B, BW, and CW that were excavated before the 1975 season. From within WALLS (loci 1309, 1364) come 6 specimens including a split and polished large mammal rib. This tertiary material could be earlier than IVC, but the small quantity of bone does not affect the overall statistics. OCCUPATION OUT & ASSOCIATED loci (555, 1302, 1304, 1307) provide 89 specimens almost 17 percent of which are rodent gnawed and 22.5 percent of which are large mammal. Some 61 bones come from OCCUPATION & FILL OUT & ASSOCIATED contexts (loci 466, 467, 469). Of these 1 is a pig axis and 1 the proximal radius of a lion (*Panthera leo*). There were very few large mammal bones recovered from these loci. Finally, there are 2 specimens from UNDIFFERENTIATED FILL OUT (locus 1305). In sum for these exterior areas, 15.8 percent of the bones are large mammal and 8.8 percent cattle, the average specimen weight is a low 4.5 g, and 12.7 percent of the collection is rodent chewed.

The **east court and kitchen** material from exterior areas A, B, and C and sheltered areas ("rooms") D and E again includes both screened and unscreened fractions. Some 75 specimens come from unscreened OCCUPATION IN loci of room D (3751) and room E (3758). Just over 13 percent of these few bones are large mammal but there are no countable cattle bones. Also without any screened counterparts are 12 OCCUPATION & FILL IN specimens from room D (locus 3734), 20 bones from ROOM FILL IN & ASSOCIATED (locus 3742) of room E, and 2 fragments classed as MIXED OR OTHER but coming from the drain separating area A from areas B and C (locus 3757). All of the remaining 2219 specimens come from those three exterior areas and include both screened and unscreened fractions.

From OCCUPATION OUT loci in court C (3746, 3750, 3752, 3753, 3756, 3761) come 484 specimens including the distal ulna of an eagle (Hieraaetus fasciatus), the distal radius of a bear (probably Selenarctos thibetanus), and the second phalanx of a canid (Canis sp.). There are also 4 gazelle bones (male horncore, metacarpal shaft, femur shaft, second phalanx) and a shaped and polished sheep/goat ulna. Some 12.0 percent of the mammal bones are rodent gnawed to some degree and 3.5 percent bear cut marks. In the unscreened fraction, only 7 percent of the bones come from large mammals and there are no countable cattle bones. The proportions for the combined fractions are 4.8 percent large mammal and 1.8 percent cattle.

OCCUPATION OUT & ASSOCIATED material comes from exterior areas A (loci 3755, 3765, 3766) and B (loci 3759, 3762-3764) as well as court C (3712, 3713, 3719, 3737, 3738, 3745, 3749). Of note from area A are 2 gazelle bones (radius shaft and third phalanx); from area B come 2 gazelle bones (skull fragment and astragalus), 1 Testudo fragment, 3 bird bones (2 tibiotarsus shaft fragments from partridge or francolin and a sternum fragment from a dove - Streptopelia sp.), and 2 bone tools (sheep proximal metatarsal and sheep/goat shaft); while from court C there are 4 gazelle bones (mandible, distal scapula, acetabulum, femur shaft), a mongoose sacrum (Herpestes sp.), 2 Testudo fragments, 2 bird bones (an unidentified shaft fragment from a small/medium bird and a coracoid fragment from a francolin or partridge), and a scratched and polished sheep distal tibia. Of the 213 bones from the unscreened fraction, 12.2 percent are from large mammals and 8.9 percent from cattle, proportions considerably higher than those from the unscreened

"occupation in" contexts of court C. Combining the screened and unscreened fractions (1727 mammal bones total), 5.6 percent are from large animals, 3.5 percent from cattle, these statistics showing once again that large mammal bones are more likely to be collected without the use of the screen than are medium and small mammal remains. Bones with cut marks make up 7.5 percent of the unscreened fraction, 1.7 percent overall, and bones showing signs of burning are 6 percent of the total assemblage, all except 2 specimens coming from the screened fraction (most burned pieces are small fragments) and most of those from areas A and B. Almost the same percentage of bones shows signs of rodent gnawing (6.1%), but these are found more heavily in the unscreened than in the screened fraction (20.2% and 4.1% of the unscreened and screened fractions respectively as opposed to 0.9% and 6.7% for the burned bone).

In sum, about 30 percent of the IVC.2 faunal material, screened and unscreened, comes from on or just above occupation surfaces that were inside rooms or in sheltered areas. When the unscreened material alone is considered, the proportion rises to almost half (48.6%). Overall, large mammal bones make up 7.1 percent of the total assemblage and 11.9 percent of the unscreened fraction. The percentages for cattle are 5.5 and 8.7 respectively, for caprines 90.6 and 89.4, and for other mammalian taxa 3.9 and 1.9. Thus for IVC.2, screening increased the proportion of "exotic" taxa and, to a lesser extent, sheep and goat in the species tables at the expense of cattle. Finally, as noted, bones with cut marks are relatively frequent in IVC.2 assemblages compared to those of earlier periods. The proportion for the unscreened fraction is

5.9 percent, for the two fractions combined, 2.6 percent. Percentages that can be compared to the unscreened fraction are 0.5 for period VII, 1.1 for period VI, and 1.8 for period V.

As noted above, the debris of phase **IVC.1** is later than the principal occupation of the IVC architectural complex and is made up chiefly of fill reaching to the preserved tops of the IVC walls. The only screened material comes from the **upper east side** and is ROOM FILL IN & ASSOCIATED well above the occupation surfaces in Area A (room 1 and areas A-E) excavated during the 1975 season (loci 3706, 3707sc, 3715, 3718, 3724sc, 3733, 3767sc). A total of 808 specimens was recovered from these deposits, 618 from the screens, 190 picked from the fill by the workmen. Among these are a Testudo fragment and 6 bird bones including 2 specimens from francolin or partridge (fragmentary sternum, furcula) and 1 each from houbara bustard (Chlamydotis undulata - femur shaft), mallard duck (Anas platyrhynchos - coracoid), golden eagle (Aquila chrysaetos - carpometacarpus shaft), and (?)pochard (Aytha ferina - humerus shaft). All except 1 bird bone came from the screens. There are also 4 gazelle bones (mandible fragment, skull fragment, tooth, first phalanx), a fox tooth (Vulpes sp.), and one bone tool (caprine proximal tibia). Of the unscreened mammal bone, 5.8 percent come from large mammals, 9.5 percent from cattle. The fact that the cattle proportion is higher than the large mammal proportion reflects the almost complete absence of shaft and other large mammal fragments from the unscreened fraction. Proportions for the combined fractions are 4.7 percent large mammal and 3.1 percent cattle. There are relatively few bones with cut marks from these loci, the percentages

being 2.1 for the unscreened fraction and 1.2 for the combined material. The proportion of rodent gnawed bone is also relatively low being 3.9 percent for screened and 6.3 percent for unscreened material.

From **IVC.1 Interior** contexts there are 262 specimens. The 135 bones from OCCUPATION & FILL IN come from a small area in the east part of Area B that was rebuilt later than the original construction of the complex to form at least 2 small alcoves (room 3 - locus 279 and room 4 - loci 302, 308 and the area between room 4 and the east section - locus 278). There are 2 gazelle bones from this assemblage (proximal radius and ulna that articulate) and a relatively high proportion of the bones are rodent chewed (16.3 percent). Some 4.4 percent of the specimens are large mammal and 1.7 percent cattle (compared to 3.4 percent gazelle). Also from this area are 39 bones from PLATFORM OR LEVELING over the top of room 4 (loci 282, 301). Included are a gazelle proximal tibia and pig maxillary fragment. There are no identified cattle bones. Finally there are 88 specimens from ROOM FILL IN & ASSOCIATED from upper deposits in room 6 (loci 280, 293, 296, 305). Of note are 5 Testudo carapace fragments possibly all from the same individual. Some 12 specimens bear cut marks and 21 signs of rodent gnawing, rather large numbers for such a small assemblage. For all of these interior loci, the proportion of cut bone is a high 8.6 percent and of rodent gnawed bone an even higher 19.8 percent. Percentages for large mammal and cattle overall are 7.8 and 3.4.

The final group of IVC.1 material comes from **exterior area G** and is divided into an earlier and a later fraction. The early fraction includes 62 specimens from OCCUPATION OUT & ASSOCIATED loci (410, 550,

551) and 73 bones from OCCUPATION & FILL OUT & ASSOCIATED loci (409, 468, 525, 549, 536, 543, 554) to the west of the IVC complex in Areas B, BW, and CW. Of note from the occupational debris is a Testudo fragment while from the occupation and fill deposits come 2 gazelle bones (metatarsal shaft and first phalanx). Of the combined 134 mammal bones, 10.4 percent are large mammal and of the identified fraction, 7.8 percent are cattle and 3.9 percent gazelle. Some 11.9 percent of the collection is rodent gnawed and 4.5 percent bear cut marks.

The later fraction from exterior area G includes 431 specimens. Some 103 of these come from WALLS or "buttressing" (loci 309, 542, 556) and, to the extent that they are tertiary in origin, will be earlier than IVC.1. Included in this assemblage are a gazelle metapodial shaft fragment, a pig tooth, and a polished goat astragalus that could have been used as a gaming piece. Rodent gnawed specimens make up 16.5 percent of the collection and bones with cut marks 4.9 percent. Both proportions are of a magnitude characteristic of Yahya IVC. The 12 large mammal bones (11.%), on average, are very heavy (53.6 g) and of the identified fraction, cattle make up 17.9 percent. Both phenomena are due to the presence of some large, well preserved, cattle elements including articulating distal tibia, astragalus, and Os malleore found together with a distal humerus and sacrum fragment in Area G. It seems doubtful that such specimens could have been included in bricks or mortar and thus they, at least, probably represent secondary trash.

Also from the later phase in exterior area G are 249 bones from OCCUPATION & FILL OUT & ASSOCIATED loci (337, 342, 355, 377, 399, 526, 534, 537, 544, 547, 552, 553). These deposits provided bones from a

wide variety of taxa including gazelle (first phalanx), pig (calcaneum), equid (skull fragment), Testudo (2 fragments), and rock dove (Columba livia - humerus shaft) as well as sheep, goat, and cattle. Some 9.8 percent of the mammal bones are rodent gnawed and 3.3 percent bear cut marks. Large mammal remains make up 13.0 percent of the assemblage, cattle 10.5 percent of identified portion. Finally, there are 20 specimens from a ROOM FILL IN & ASSOCIATED locus (545), 7 bones from UNDIFFERENTIATE FILL OUT (locus 539) and 52 fragments from pit in area G that are tabulated as MIXED OR OTHER. Overall for the later phase, 11.2 percent of the bones are from large mammals, 11.7 percent from cattle (because of the high proportion of identified articular areas), 11.2% rodent gnawed, and 4.0% cut. Except for the high proportion of cattle, the percentages are all quite close to those from the earlier phase of IVC.1 in exterior area G.

The not screened collections of phases IVC.2 and IVC.1 are of nearly the same size (1034 and 1008 specimens respectively). The proportion of large mammal is 11.9 percent in the earlier, 9.2 percent in the later with the percentages for cattle being 8.7 and 8.1, for medium mammal being 86.8 and 90.0, and for caprines being 89.4 and 89.9. The bones of IVC.2 average heavier than those of IVC.1 as do the the average weights for large and medium mammals individually. If screened and unscreened fractions are combined in each of the two phases, the reverse is true for the weights because a much higher proportion of the IVC.2 material comes from screens. The effects of screening will be discussed further in Chapter 8.

The last 42 mammal specimens from sub-period IVC come from ROOM FILL IN & ASSOCIATED deposits from Area B that could belong to **IVC.2 or 1** or to both (locus 286). All of this material is medium mammal with a relatively high average weight (7.6 g). Included are 2 gazelle bones (male horncore and proximal ulna) and about one quarter of the specimens are rodent gnawed. There is also a fragment of an ulna shaft from an eagle owl (Bubo bubo) that, like the specimen from the floor of room 5 noted above, had been ground to a bevel on one end to make a tool.

Finally, there is a group of specimens from loci that contain IVC material together with specimens from periods V and VI. These bones are not included on the count/weight, species, or modification tables, the salient statistics being described here instead. From IVC-VA mixed fill (loci 304, 307, 325) in the northeastern part of Area B come 54 specimens of which 48 are medium mammal (162.5 g), 2 are large mammal (27.5 g), 3 are "other" (7.0 g), and 1 is a Testudo fragment. There is one bone with cut marks and 8 are rodent chewed. Standardized counts include 8 sheep, 3 goat, 4 sheep/goat and 1 cattle. From a IVC-V locus (775) in Area C (the IVC drainage ditch) there are 5 specimens, all medium mammal (18 g) including 1 goat bone. From IVC-VI mixed material excavated in Area A (locus 3768) come 16 specimens including 2 large mammal (15 g), 13 medium mammal (62.5 g), and 1 bird (carpometacarpus shaft of Bubo bubo). There are 1 identified sheep, 1 identified goat, and 4 sheep/goat bones in this collection and 1 bone is rodent gnawed. From mixed fill and pit debris in area G of Areas BW (locus 517) and CW (locus 1310) are 47 IVC-VIA bones including 4 large mammal (50.5 g), 42 medium mammal (186.5 g), and 1 other (1.0 g). Two bones are cut and 4

rodent chewed. Standardized counts are 5 sheep/goat, 2 sheep, and 5 goat.

Chapter 8

CONCLUDING OBSERVATIONS ON CONTEXT AND TAPHONOMY

8.1. INTRODUCTION

This chapter includes presentation and discussion of summary data with the goal of discerning general patterns in the distribution of bones through time and context. Already in Chapter 7 various patterns were noted although these were nowhere nearly so striking as the considerable variation evident. Such variation was sometimes explicable when the specific contexts of the faunal assemblages were reviewed. The nature of such explanations, however, were ad hoc and not based on any attempt to examine variation in systematic fashion. This is attempted here, although the reader should be warned that it must be considered only a preliminary foray.

Of the two sections that follow, the first deals with data from the "count/weight", "species", and "modification" tables as summarized in Tables 7.13-7.56. As was noted in Chapter 7, these summary tables

represent column and row totals from Tables 7.1-7.12. Selected statistics have been abstracted and plotted in Figures 8.1-8.7 and tabulated in Table 8.1. The second section considers skeletal part distributions for medium and large mammals. Tables 8.2-8.37 provide the counts, Tables 8.38-8.50 are matrices of skeletal part frequency ranks used to calculate rank-order correlation coefficients tabulated in Table 8.51, and Tables 8.53-8.60 compare medium mammal skeletal part frequency ranks with ranks based on the bone densities for sheep listed in Table 8.52.

8.2. PATTERNS IN THE SUMMARY DATA

Throughout this section, summary statistics representing an assemblage taken as an undifferentiated unit are used with little explicit regard for the ranges of variation that they conceal. In order to show awareness of the problems of such an approach, Figure 8.1 is presented. There, ranges of variation around the overall values for large mammal bones as percents of total bone counts (Table 1a) and bone weights (Table 1b) are graphed as a series of vertical lines each of which represents the data from a temporal unit. The end points of the range for each unit represent the extremes of variation for the various context types within that unit. (Note that variations in percentages for large mammal or cattle mirror those for medium mammal or caprines. Thus trends described for large mammal or cattle are the opposite of those for medium mammal or caprines.) As in all the figures included in this chapter, time/context units with fewer than 100 specimens are excluded from consideration or not plotted in an attempt to minimize

what might be chance variation. For some temporal units (e.g., Yahya VIID, VIIA, VC, VB), ranges based on sufficiently large assemblages could not be plotted. These units are represented by small horizontal lines, labeled with a letter representing the unit concerned, that are within or outside of the range for another temporal unit in the same period. The lines labeled "VII", "VI", "V", and "IVC" summarize all the data from those periods while the period designations modified with a letter (e.g., VIIB) refer to a subset of the data, a subset that is included in the overall values as well.

Although the displayed variation is great in both parts of Figure 8.1, some comfort can be found in the fact that the extremes, when viewed in relation to each other, follow basically the same pattern as the means. Thus, there is a decrease in large mammal representation (and concomitant increase in medium mammal representation) for Yahya VIIC to VIIB, an increase through Yahya VI, and a subsequent decrease in Yahya V and IVC. The overall values for Yahya VII and Yahya V, in both counts and weights, are remarkably similar although the ranges of variation for the earlier unit are much greater. As was noted in Chapter 7, the statistics for Gaz Tavila-R37 and Yahya IVC are remarkably similar although, again, the ranges of variation for the earlier unit are greater. The effects of screening many Yahya IVC excavation units are also evident in these graphs, the not screened fraction ("ns") probably being the most comparable to the material from earlier temporal units. Finally, only for R37 and Yahya IVC does the overall weight for large mammal bone fall below 50 percent of the total, the ranges for the overall figures being c.60-80 percent for Yahya VII-V

and c.35-45 percent for R37 and Yahya IVC. When ranges for individual temporal units are considered, there is some overlap, but the overall dichotomy is striking.

The question now is to what degree the trends and differences noted in Figure 8.1 can be related to patterned variation between context types. This problem is addressed in Figure 8.2 where large mammal count and weight percentages for each major temporal unit are plotted by context type (see Chapter 6 for discussion of context types). Here, unfortunately, we are bedeviled by the problem of missing values that we will meet again in most of the remainder of the figures. Thus Yahya VI and IVC are represented by only four and six values, respectively (excluding the total), none of which are from the same context type. Yahya VII and R37 have the fewest missing values and can be compared for seven context types although, sadly, not for midden deposits (M).

The highest values for large mammal (and lowest values for medium mammal) as percent of total counts (Figure 8.2a) occur for Yahya VI in the "mixed" and "rubble" context types (Mx and R). Most of the "mixed" material comes from Area CDE and was associated with the leveling operations in that area (see Chapter 7). It is thus likely to reflect depositional activities associated with those that produced a more strictly rubble fill. The other two values for period VI (M and FO) are significantly lower than those for "rubble" and "mixed" and are remarkable similar to the values (M and FO) for Yahya VII and for Yahya VII and V respectively. The same is true for bone weights (Figure 8.2b). This might be an indication that, in fact, the high proportion of large mammal bones (low proportion of medium mammal bones) in Yahya

VI is a reflection more of context type than of actual patterns of animal utilization. This suggestion has been made previously (in Chapter 7 and in Meadow 1986: 37).

As far as the other temporal divisions are concerned, there is little variation in large mammal bone count percentages between context types in R37 and in Yahya V and IVC. There is, however, considerable variation in Yahya VII where interior occupation deposits (OI) or those interior deposits with a significant component of occupational debris (OFI) tend to have proportionately fewer large mammal bones than corresponding exterior deposits (OO and OFO), and upper fill deposits of both kinds (FI and FO) together with platform debris (PL) have even more large mammal remains. This is the pattern that was documented for Hajji Firuz (northwestern Iran, 6th millennium b.c.: Meadow 1978a) and was the expected pattern for Tepe Gaz Tavila-R37 and for Tepe Yahya. For R37, however, the only real indication of a similar pattern is in the occupational deposits themselves (OI vs. OO). Patterns for the other temporal units are equivocal, even contradictory. This is particularly a problem for Yahya IVC where some of the best defined occpational deposits were excavated.

Turning to Figure 8.2b, patterns for bone weights are more difficult to deal with, this probably at least in part reflecting the problems of comparing bone weights between context types and temporal units because of differential diagenesis. Thus the values for Yahya VI for the mixed and especially rubble context types (Mx and R) appear low relative to that for the fill out (FO) contexts perhaps because the former deposits were exposed to extensive leaching. The situation noted

for Yahya VII bone counts relative to interior and exterior occupation deposits is confirmed for bone weights also, with the percentage for large mammals being higher in the latter type of contexts. Interestingly enough, R37 also clearly follows the same pattern, but not Yahya V or IVC where the situation, when definable, is exactly the reverse. This can be attributed, at least in part, to some big large mammal specimens in interior loci in Yahya V and IVC (see Chapter 7). Finally, the difference between screened and unscreened units of Yahya IVC again should be noted.

One question that arises at this point is whether the "large mammal" statistics provide good estimators for Bos (cattle) and the "medium mammal" statistics for caprines. On the face of it they should, as there is relatively little bone from other mammals identified from the site. Something of a test of congruence can be made, however, by plotting percentage of large mammal calculated on the basis of the total assemblage for a temporal unit alongside the percentage calculated on the basis of standardized counts (see Chapter 7, Section 7.2.3). This has been done in Figure 8.3a. The two "curves" formed by joining the points for the temporal units have generally the same shape although differences are clearly evident as well. The greatest of these discrepencies, however, occur in those assemblages with the smallest total and standardized specimen counts (VIID: 211 total specimens; VIIC: 505; VC: 388; VB: 505; and VA: 768). This leads one to suspect that the percentages calculated for "large mammal" and "medium mammal" may be better estimators for cattle and caprine bone representation, respectively, when assemblages are small than those based on the

standardized counts. Combining all of the material into gross temporal units as in Table 8.1, however, may help to overcome this problem, at least for looking at overall patterns of change through time. (Table 8.1 is discussed in Section 8.4, below.)

In spite of the possible effects of small assemblage size, Figure 8.3b was plotted to show the variation of standardized count percentages over the different context types. A comparison of this figure with Figure 2a reveals variation principally in detail, with major differences occurring only for R37 (FO), Yahya V (OO & OFO), and IVCns (W and OO). In all these cases, the trend is toward lower large mammal percentages in exterior contexts and might indicate poorer preservation of articular areas for large mammal bones in more exposed areas, as it is the articular areas that are used for the standardized counts. Thus, it is clear that taphonomic considerations cannot be ignored when using different means of counting specimens for estimating relative representation of different taxa. This matter arises again in relation to skeletal part distributions discussed in the following section.

Shifting from percentages of weights and counts to indices calculated by dividing weights by counts, Figures 8.4 and 8.5 show mean specimen weights plotted by context type and/or temporal unit. Again it is necessary to qualify any judgements made by the statement that comparing specimen weights across a site through time and space and between sites is a risky undertaking because of the potential for significant differences in preservational environment. In addition, the faunal materials considered here were often badly broken during excavation and handling, and records were not kept of counts and weights

of bones from certain loci of Yahya periods VII-V that were extracted for radiocarbon dating (see Chapter 7, Section 7.3).

In spite of the problems, a couple of interesting patterns are revealed by the average weight data. For one thing, there is little absolute variation across time or context type in the average weight of a medium mammal specimen, with the range being from about 2 to 5 grams. In relative terms, of course, this is a difference of two and one-half times with the lowest average medium mammal weights being in R37 and Yahya VII and the highest in the unscreened fraction of Yahya IVC. (Note that in Figures 8.4 and 8.5, only the unscreened fraction from IVC is plotted with the exception of Figure 8.4a where average weights for the screened fractions are indicated by vertical bars, the top extreme representing large mammal, the bottom extreme medium mammal.)

For no average weight value (large mammal, overall average, or medium mammal), however, is any trend of change over time evident in Figure 8.4a with the possible (and significant) exception of the fact that Yahya IVC has the highest average values for both large and medium mammal bone weights. This pattern may indicate less complete fragmentation of bone material than in earlier periods if average bone weight can be equated with fragment size. As already noted (earlier in this section and in Chapter 7), the heaviest large mammal bones occur in Yahya IVC, a few large specimens being particularly characteristic of upper interior deposits (OFI, FI) but not of occupational layers themselves (OI, OO) as is evident in Figure 8.5. Such a pattern may be related to the cessation of active habitation of the Yahya IVC complex.

Other trends in average weights for large mammal bones are not clearly evident, there in fact being considerable contradiction in patterning between the different periods when context type is considered. Many of the peaks can be explained in relation to the peculiar circumstances of individual contexts (see Chapter 7), this suggesting that for most of the Yahya and R37, average bone weights can do little to clarify cultural practices or taphonomic circumstances on a general level.

Looking now at bone modification, percentages of bones with cut marks (and/or blow marks), signs of carnivore and rodent chewing, and burning are plotted in Figure 8.6 by temporal unit, while rodent gnawing alone is plotted by context type in Figure 8.7. Tepe Gaz Tavila-R37 is characterized by a low incidence of all types of modification. As for Yahya, the only real trend through time is something of an increase in the incidence of cut marks, with a marked jump evident in Yahya IVC (unscreened fraction only). This phenomenon may be related to an increase in the use of metal tools for butchering during this period and may correlate with the somewhat heavier (equals larger?) large and medium mammal bone fragments characteristic of that period (see above). The vast majority of cut marks in all periods occur near or on articular surfaces, this indicating that they result from dismemberment rather than from removing meat from the bones. A more detailed study of the locations of cut marks on bones from the Yahya and R37 assemblages might prove profitable, particularly a comparison of Yahya IVC with the earlier periods.

The incidence of burned bone in the Yahya and Gaz Tavila-R37 collections is highly variable, this certainly related to the characteristics of the individual deposits in the various periods (see Chapter 7). There is no good evidence on any specimen (in the form of "spit marks"; see Vigne and Marinval-Vigne 1983) for the roasting of meat. In addition, the fact that most burned bone is associated with ash dumps, hearths, or "kilns" suggests that most burning is not related to food preparation but to post-consumption activities.

Identifiable carnivore gnawing is rare at Tepe Yahya and was not noted on any specimen at Tepe Gaz Tavila-R37. To judge from their bones, however, dogs appear to have been present at both sites and why there is not greater direct evidence for their activity is something of a puzzle. It may be, however, that complete destruction of smaller and softer bone by dogs was the most common phenomenon, gnawed bone indicating only interrupted or incomplete carnivore consumption. The skeletal part profiles to be presented in the next section clearly suggest differential destruction related to size and "density" of bone or parts of bones and this may be better evidence for carnivore activity than the actual marks on specimens. (See also Binford and Bertram 1977, Binford 1981, and Brain 1981 for considerable discussion of these matters.)

Common at Tepe Yahya, but not at Gaz Tavila-R37, is evidence for rodent activity in the form of gnaw marks on bones. This matter was discussed previously in Chapter 6 (Section 6.5) where the presence of large numbers of rodent burrows in the site was noted. With the exception of Yahya VIA (and the screened fraction of IVC), all temporal

units after Yahya VIIB have rodent gnawing on more than 9 percent of their bones, the peak being about 15 percent in Yahya IVC.2 (not screened). As a generalization, it is possible to say from Figure 8.7 that the the highest levels of rodent gnawing occur in assemblages from occupational deposits (especially OI, OO, OFI), the lowest from rubble (R), platforming (PL), and fill deposits (FI and FO), and the most variable from exterior occupation and fill (OFO) and midden (M) deposits. Variability in the last is particularly marked with midden deposits from Yahya VI having a high degree of rodent gnawing, those from Yahya VII a low degree. The Yahya VII midden deposits yielded a great deal of ash and burned bone, however, phenomena that may be related to the lack of evident rodent activity.

Although not specifically recorded, it was observed that most rodent gnawing seemed to concentrate on the articular ends in areas where there is likely to have been articular cartilage or ligaments remaining after human consumption. This would suggest scavenging by rodents soon after bone disposal, which in turn may indicate that where such specimens were found is not far from where they were originally dumped. Bone movement through the deposits due to rodent activity almost certainly occurred, however, although it seems impossible to measure the degree to which it has actually affected the faunal statistics. Future tabulation of rodent gnawing by skeletal part, animal size, and fragment size might be one way to begin.

8.3. SKELETAL PART DISTRIBUTIONS

This section must be seen as only an introduction to a complex topic,

the principal purposes being to present the data for skeletal part distributions according to animal size (medium mammal and large mammal) and to suggest lines for future investigation. The data is arrayed in a series of 36 tables (Tables 8.2-8.36) making up 9 sets (R37, Yahya VII total, Yahya VIIB, Yahya VI, Yahya V, Yahya IVC.2 screened, Yahya IVC.2 not screened, Yahya IVC.1 screened, Yahya IVC.1 not screened; NOTE THAT IN THESE TABLES THE IVC SCREENED COUNTS INCLUDES COUNTS OF THE UNSCREENED BONES FOUND IN THE SAME LOCI). There are 4 tables in each set, 2 for medium mammal and 2 for large mammal. In each subset, the first table is a complete listing of all bone characterized as medium or large mammal sorted by anatomical position (head, axial skeleton, appendicular skeleton, followed by counts of bone not located as to skeletal part). The second table includes 32 selected skeletal parts (marked with an "x" on the first table) sorted by relative frequency of representation in the assemblage from relatively least to relatively best represented. For these selected specimens, counts of pieces identified only as proximal or distal "metapodial" were split evenly between proximal or distal metacarpal and metatarsal, and counts for loose deciduous third premolars and permanent third molars were added to the values for mandible-with-teeth and maxillary-with-teeth (as appropriate).

Relative frequency of representation of a skeletal part was compared to relative frequency of representation of skeletal parts of the different kinds expected in a living cow or caprine. (These are 1 occipital, 1 atlas and 1 axis (combined equaling 2), 1 sacrum, 3 tarsals, 6 carpals, 8 of each kind of phalanx, 25 vertebrae, 26 ribs,

and 2 of everthing else; these are listed under "STANDARD" in each table). The differences in the frequencies of representation were then calculated (i.e., observed minus expected: "x%-S%") and these divided by the "STANDARD" number for the appropriate skeletal part to provide a per bone deviation statistic. For example, if ribs make up 20 percent of an assemblage and 18.9 percent of the number of counted skeletal parts in a complete animal, the total deviation is 1.1 percent and the per bone deviation 0.04 percent. The per bone deviations were then sorted and the table arrayed from relatively most underrepresented to relatively best represented.

Following this ranking procedure, matrices were compiled and Spearman's coefficients of rank-order correlation computed using 7 of the 9 original assemblages (all except VIIB and IVC.1 screened). The matrices including rank orders for the various skeletal parts and the squares of the differences between rank ("d#") are presented as Tables 8.38-8.50. The Spearman's coefficients are presented in 8.51. Each temporal unit was compared to each other for medium mammal and for large mammal rankings, and the rankings for medium and large mammal were also compared but only within temporal units. The formula used for Spearman's coefficient of rank-order correlation is:

1 - 6(sum of rank differences each squared)/(N(Nsquared-1))

where N equals the total number of ranks, in this case 32 (see e.g., Blalock 1972: 416-418). If rankings agree perfectly, the correlation coefficient will be +1.0, if there is perfect disagreement -1.0, and no relationship 0.0.

Examination of Table 8.51 reveals that all medium mammal correlation coefficients fall between 0.66 and 0.87. In other words, the rankings are not that much different. What is more, the correlation coefficients between adjacent or nearby temporal units, appear to higher than those between units separted more in time. For example, the coefficient for R37 compared to Yahya VII is 0.86, compared to Yahya VI is 0.72, and compared to Yahya V-IVC: 0.66-0.71. Examination of the relevant matrix (Table 8.38) reveals that, in this example, major differences in rank occur with the occipital, atlas/axis, and vertebrae throughout, but that later in the sequence, important differences occur in the cases of the proximal metacarpal, proximal femur, distal radius, and proximal tibia. This apparently patterned change through time in skeletal part distributions deserves further investigation.

In contrast to the situation with medium mammals, correlation coefficients for large mammals are low, ranging from almost perfect non-correlation (0.05) to a high of 0.64 with the single exception of the correlation coefficient for IVC.2 screened vs. IVC.2 not screened. This last, nearly perfect, positive correlation is hardly surprising given that the skeletal part distributions for the screened assemblage includes all of the unscreened bones found in the same loci. (Note also that the value of 0.87 for medium mammal occurs in the same circumstances, but it does not upset the pattern noted above because the next highest value is 0.86 for R37/Yahya VII.) It is remarkable that there is no overlap in values between the medium mammal and large mammal correlation coefficients, this clearly indicating the much less "predictable" nature of the skeletal part distributions in large

mammals. Why this is and whether or not it may relate to context type deserves future investigation, although the generally small sample sizes for large mammal bones may make this difficult and, in fact, may provide an explanation for the phenomenon of less good correlation. Finally, as far as correlation coefficients for comparisons between large and medium mammal skeletal part distributions within temporal units are concerned, these, like those for large mammals, are weakly positive.

Given the strongly positive correlation coefficients for medium mammals, it seemed worthwhile to compare the rankings for the Yahya/R37 material with rankings reflecting some measure of bone "durability" or "density". This matter of bone density has been discussed at length by Binford (Binford and Bertram 1977 and Binford 1981), and it seemed appropriate to use his measures here listed in Table 8.52 (from Binford and Bertram 1977: 109). These "densities" were obtained from the articular ends and other selected skeletal parts for sheep of 3 different ages (6 months, 19 months, and 90 months) and thus four different comparisons seemed appropriate (one for each age and one for an average of the 3).

The matrices comparing Tepe Yahya and Tepe Gaz Tavila-R37 medium mammal skeletal part frequency ranks with ranks based on bone density are printed as Tables 8.53-8.60. Comparison with each age group (and average) is presented in two tables, one displayed by skeletal arrangement, one sorted by density rank for the modern material. Generally speaking, correlation coefficients fall between 0.45 and 0.65 in all comparisons, with a few higher and a few lower. Examination of the matrices shows that the occipital is consistently the most different

in rank between the modern and ancient material. Eliminating it would make the correlation coefficients significantly higher. Overall, then, there seems to be a reasonable fit between rankings based on bone density as measured by Binford (in grams per milliliter of displaced water: Binford and Bertram 1977: 107) and the rankings of the archaeological material. A simple interpretation is that the less "dense" a medium mammal bone is, the less likely it is to survive destructive agents. In this respect, it is interesting that among the least "dense" bones are the phalanges. They are also among the smallest and it has been tempting to believe that their underrepresentation at some sites is due to lack of screening. In fact, caprine phalanges are not that common even in the screened fraction from Tepe Yahya and thus their absence may in fact be a reflection not only of recovery techniques but also of durability.

In sum, the use of skeletal part rankings particularly for medium mammal remains seems to hold some promise as a tool useful for investigating taphonomic processes. In the future, comparisons should be made between context types and between sites as well as between temporal units.

8.4. CONCLUSION

To conclude this work, I return to Table 8.1 in which percentages of sheep, goat, cattle, and other mammal are displayed for the major temporal units. Taken at face value, there are some intriguing patterns represented. Whereas the percentages for cattle (Bos) and goat (Capra) vary widely between the different units, and whereas we have

seen the same phenomenon for "large mammal" and "medium mammal" remains, the percentages for sheep (Ovis) remain nearly constant varying only between about 21 and 27 percent. Of course, as the proportion of goats varies widely, so does the goat:sheep (C:O) ratio. This ratio has sometimes been used as an indicator of the harshness of the grazing environment around a site (e.g., Redding 1981). In fact, what seems to be happening at Tepe Gaz Tavila-R37 and Tepe Yahya is that the sheep proportion is remaining constant through time and between environmenal zones (R37 vs. Yahya VII) while the proportions for cattle and goats vary inversely to each other.

We have already made the suggestion that the relatively high quantities of large mammal (or cattle) bones in Yahya VI deposits may be the result of the peculiar nature of the rubble deposits from which most of the bones for that period derives. If that were true, then one would expect that the proportion of both sheep and goat bones would drop relative to those from cattle, not just the proportion of goat bones. This problem, together with those questions raised above in the discussion of skeletal part distributions, requires considerable further thought. To return to the quotation from Flaubert's Parrot cited at the beginning of the Introduction, I fear that my attempt to catch a greased piglet has only made it squirm harder to get away. In other words, more questions have been raised than answered by this study!

BIBLIOGRAPHY

Ali, S.
1972 The Book of Indian Birds. Bombay: Bombay Natural History Society.

American Brahman Breeders Association
n.d. "The Brahman Handbook." Houston: American Brahman Breeders Association.

Anderson, S.C.
1968 "Zoogeographic Analysis of the Lizard Fauna of Iran." In The Cambridge History of Iran, I: The Land of Iran, ed. W.B. Fisher, 305-371. Cambridge: The University Press.
1974 "Preliminary Key to the Turtles, Lizards, and Amphisbaenians of Iran." Fieldiana: Zoology 65(4):27-44.

Badoux, D.M.
1975 "General Biostatics and Biomechanics." In Sisson and Grossman's The Anatomy of the Domestic Animals, ed. R. Getty, 48-83. Philadelphia: W.B Saunders.

Baker, J. and D. Brothwell
1980 Animal Diseases in Archaeology. London: Academic Press.

Barnes, J.
1985 Flaubert's Parrot. New York: Knopf.

Barone, R.
1976 Anatomie comparee des Mammiferes domestiques. Paris: Vigot Freres.

Beale, T.W.
1973 "Early Trade in Highland Iran: a View from a Source Area." World Archaeology 5:133-148.
1978 "Tepe Yahya: the Early Periods." Ph.D. Dissertation, Department of Anthropology, Harvard University.
1986 "The Architecture." In Excavations at Tepe Yahya, Iran, 1967-1975: The Early Periods, 101-165. American School of Prehistoric Research, Bulletin 38. Cambridge: Peabody Museum, Harvard University.
1986a "The Small Finds." In Excavations at Tepe Yahya, Iran, 1967-1975: The Early Periods, 167-206. American School of Prehistoric Research, Bulletin 38. Cambridge: Peabody Museum, Harvard University.

Beale, T.W. and S.M. Carter
1983 "On the Track of the Yahya Large Kus: Evidence for Architectural Planning in the Period IVC Complex at Tepe Yahya." Paleorient 9/1:81-88.

Beale, T.W., C.C. Lamberg-Karlovsky, and others
1986 Excavations at Tepe Yahya, Iran, 1967-1975: The Early Periods. American School of Prehistoric Research, Bulletin 38. Cambridge: Peabody Museum, Harvard University.

Behrensmeyer, A.K. and A.P. Hill, eds.
1980 Fossils in the Making. Chicago: University of Chicago Press.

Binford, L.R.
1973 "Interassemblage Variability - the Mousterian and the 'functional argument'." In The Explanation of Culture Change, ed. C. Renfrew, 227-254. London: Duckworth.
1981 Bones: Ancient Men and Modern Myths. New York: Academic Press.

Binford, L.R. and J.B. Bertram
1977 "Bone Frequencies - and Attritional Processes." In For Theory Building in Archaeology, ed. L.R. Binford, 77-153. New York: Academic Press.

Blanford, W.T.
1888-91 The Fauna of British India, including Ceylon and Burma: Mammalia. London: Taylor and Francis.

Boessneck, J.
1962 "Die Tierreste aus der Argissa-Magula vom prakeramischen Neolithikum bis zur mittleren Bronzezeit." In Die deutschen Ausgrabungen auf der Argissa-Magula in Thessalien, vol. 1, V. Milojcic, J. Boessneck, and M. Hopf, 27-99. Beitrage zur ur- und fruhgeschichtlichen Archaologie des Mittelmeer-Kulturraumes, vol. 2. Bonn: Rudolf Habelt Verlag.
1969 "Osteological Differences between Sheep (Ovis aries Linne) and Goat (Capra hircus Linne)." In Science in Archaeology, second edition, ed. D. Brothwell and E.S. Higgs, 331-358. London: Thames and Hudson.

Boessneck," J. and A. von den Driesch
1975 "Tierknochenfunde vom Korucutepe bei Elazig in Ostanatolien." In Korucutepe 1, ed. M.N. van Loon, 1-220. Amsterdam: North Holland Publishing Co.
1976 "Pferde in 4./3. Jahrtausend v. Chr. in Ostanatolien." Saugetierkundliche Mitteilungen 24:81-87.

Boessneck, J. and M. Kokabi
1981 "Tierknochenfunde." In W. Orthmann, "Halawa 1977-1979." Saarbrucker Beitrage zur Altertumskunde 31:89-104.

Boessneck, J., H.-H. Muller, and M. Teichert
1963 "Osteologische Unterscheidungsmerkmale zwischen Schaf (Ovis aries Linne) and Ziege (Capra hircus Linne)." Kuhn Archiv 78:1-129.

Bokonyi, S.
1970 "A New Method for the Determination of the Minimum Number of Individuals in Animal Bone Material." American Journal of Archaeology 74:291-292.
1972 "The Prehistoric Vertebrate Fauna of Tal-i-Iblis." In Investigations at Tal-i-Iblis, ed. J.R. Caldwell, 309-317. Illinois State Museum Preliminary Reports 9. Springfield: Illinois State Museum Society.
1973 "Some Problems of Animal Domestication in the Middle East." In Domestikationsforschung und Geschichte der Haustiere, ed. J. Matolcsi, 69-75. Budapest: Akademiai Kiado.
1977 Animal Remains from the Kermanshah Valley, Iran." Oxford: BAR S34.
1986 "The Equids of Umm Dabaghiyah, Iraq." In Equids in the Ancient World, eds. R.H. Meadow and H.-P. Uerpmann, 302-317. Beihefte zum Tubinger Atlas des Vorderen Orients, Reihe A, Nr. 19/1. Wiesbaden: Dr. Ludwig Reichert Verlag.

Bohlken, H.
1961 "Haustiere und zoologische Systematik." Zeitschrift fur Tierzuchtung und Zuchtungsbiologie 76:107-113.

Brain, C.K.
1981 The Hunters or the Hunted? Chicago: University of Chicago Press.

Brink, F.H. van den
1968 A Field Guide to the Mammals of Britain and Europe. Boston: Houghton Mifflin.

Bullock, D. and J. Rackham
1982 "Epiphyseal Fusion and Tooth Eruption of Feral Goats from Moffatdale, Dumfries and Galloway, Scotland." In Ageing and Sexing Animal Bones from Archaeological Sites, eds. B. Wilson, C. Grigson, and S. Payne, 73-80. Oxford: BAR British Series 109.

Burney, C.
1975 "Tepe Yahya: its implications for Near Eastern Archaeology." Antiquity 49:191-196.

Caloi, L. and B. Compagnoni
1981 "Preliminary Remarks on the Bovine Remains at the Archaeological Site of Shahr-i Sokhta (Iranian Sistan) (3200-1800 B.C.)." In South Asian Archaeology 1979, ed. H. Hartel, 181-190. Berlin: Dietrich Reimer Verlag.

Casteel, R.W.
1978 "Faunal Assemblages and the 'Wiegemethode' or Weight Method." Journal of Field Archaeology 5: 71-77.

Cheylan, M.
1981 Biologie et Ecologie de la Tortue d'Hermann Testudo hermanni Gmelin, 1789. Montpellier: Ecole pratique des hautes Etudes (3e section), Memoires et Travaux de l'Institut de Montpellier, No. 13.

Chow Ben-Shun
1984 "Animal Domestication in Neolithic China." In Animals and Archaeology: 3. Early Herders and their Flocks, ed. J. Clutton-Brock and C. Grigson, 363-369. Oxford: BAR S202.

Clason, A.T.
1983 "Faunal Remains." In "Bouqras Revisited: Preliminary Report on a Project in Eastern Syria", P.A. Akkermans et al., 359-362. Proceedings of the Prehistoric Society 49:335-372.

Clutton-Brock, J.
1981 Domesticated Animals from Early Times. London: British Museum (Natural History).

Compagnoni, B.
1978 "The Bone Remains of Equus hemionus from Shahr-i Sokhta." In Approaches to Faunal Analysis in the Middle East, eds. R.H. Meadow and M.A. Zeder, 105-118. Peabody Museum Bulletin 2. Cambridge: Peabody Museum, Harvard University.

Corbet, G.B.
1978 The Mammals of the Palaearctic Region: A Taxonomic Review. London: British Museum (Natural History).

Corbet, G.B. and J. Clutton-Brock
1984 "Appendix: Taxonomy and Nomenclature." In Evolution of Domestic Animals, ed. I.L. Mason, 434-438. London and New York: Longman.

Costantini, L.
1984 "The Study of Palaeoethnobotanical Remains from Settlements in the Soghun and Dolatabad Valleys, Iran." Preliminary Manuscript prepared for C.C. Lamberg-Karlovksy, Department of Anthropology, Harvard University.
1984a "The Beginnings of Agriculture in the Kachi Plain: the Evidence of Mehrgarh." In South Asian Archaeology 1981, ed. B. Allchin, 29-33. Cambridge: The University Press.
1985 "Agriculture in Baluchistan between the 7th and 3rd Millennium B.C." Newsletter of Baluchistan Studies 2: 16-30.
1985a "Considerazioni su Alcuni Reperti di Palma da Dattero e sul Centro di Origine e l'Area di Coltivazione della Phoenix dactylifera L." In Orientalia Iosephi Tucci Memoriae Dictata, ed. G. Gnoli, 209-217. Serie Orientale Roma 56(1). Rome: Istituto Italiano per il Medio ed Estremo Oriente.

Cramp, S., ed.
1985 The Birds of the Western Palearctic, Volume 4. Oxford: Oxford University Press.

Cramp, S. and K.E.L. Simmons, eds.
1977 The Birds of the Western Palearctic, Volume 1. Oxford: Oxford University Press.
1980 The Birds of the Western Palearctic, Volume 2. Oxford: Oxford University Press.
1983 The Birds of the Western Palearctic, Volume 3. Oxford: Oxford University Press.

Crawford, R.D.
1984 "Domestic fowl." In Evolution of Domestic Animals, ed. I.L. Mason, 298-310. London and New York: Longman.

Dahl, G. and A. Hjort
1976 Having Herds: Pastoral Herd Growth and Household Economy. Stockholm Studies in Social Anthropology 2. Stockholm: Department of Social Anthropology, University of Stockholm.

Darwin, C.
1868 The Variation of Animals and Plants under Domestication, Volume I. London: John Murray.

Davis, S.J.M.
1980 "A Note on the Dental and Skeletal Ontogeny of Gazella." Israel Journal of Zoology 29:129-134.
1981 "The Effects of Temperature Change and Domestication on the Body Size of Late Pleistocene to Holocene Mammals of Israel." Paleobiology 7(1):101-114.

Deniz, E. and S. Payne
1982 "Eruption and Wear in the Mandibular Dentition as a Guide to Ageing Turkish Angora Goats." In Ageing and Sexing Animal Bones from Archaeological Sites, eds. B. Wilson, C. Grigson, and S. Payne, 155-205. Oxford: BAR British Series 109.

Dive, J. and V. Eisenmann
in press "Identification and Discrimination of First Phalanges from Pleistocene and Modern Equus, Wild and Domestic." In Equids in the Ancient World, II, eds. R.H. Meadow and H.-P. Uerpmann. Beihefte zum Tubinger Atlas des Vorderen Orients, Reihe A, Nr. 19/2. Wiesbaden: Dr. Ludwig Reichert Verlag.

Dottrens, E.
1946 "Les phalanges osseuses de Bos Taurus domesticus." Revue suisse de Zoologie 53:739-774.

Driesch, A. von den
1975 "Die Bewertung pathologisch-anatomischer Veranderungen an vor- und fruhgeschichtlichen Tierknochen." In Archaeozoological Studies, ed. A.T. Clason, 413-425. Amsterdam: North Holland Publishing Co.
1976 A Guide to the Measurement of Animal Bones from Archaeological Sites. Peabody Museum Bulletin 1. Cambridge: Peabody Museum, Harvard University.

Driesch, A. von den and J. Shaffer
1985 "20 Jahre Institut fur Palaeoanatomie, Domestikationsforschung und Geschichte der Tiermedizin der Universitat Munchen, 1965-1985". Munich: Institut fur Palaeoanatomie.

Ducos, P.
1968 L'Origine des Animaux domestiques en Palestine. Publications de l'Institut de Prehistoire de l'Universite de Bordeaux, Memoire 6. Bordeaux: Imprimeries Delmas.
1986 "The Equid of Tell Muraibit, Syria." In Equids in the Ancient World, eds. R.H. Meadow and H.-P. Uerpmann, 237-245. Beihefte zum Tubinger Atlas des Vorderen Orients, Reihe A, Nr. 19/1. Wiesbaden: Dr. Ludwig Reichert Verlag.

Duerst, J.U.
1926 Das Horn der Cavicornia. Neue Denkschriften der Schweizerischen naturforschenden Gesellschaft, vol. 63. Zurich: Zurcher und Furrer.

Dyson, R.H., Jr.
1966 "Excavations on the Acropolis at Susa and Problems of Susa A, B, and C." Ph.D. Dissertation, Department of Anthropology, Harvard University.

Eisenmann, V.
1980 Les Chevaux (Equus sensu lato) fossiles et actuels: cranes et dents jugales superieures. Cahiers de Paleontologie. Paris: Editions du CNRS.
1981 "Etude des dents jugales inferieures des Equus (Mammalia, Perissodactyla) actuels et fossiles." Palaeovertebrata 10(3-4):127-226.
1986 "Comparative Osteology of Modern and Fossil Horses, Half-asses, and Asses." In Equids in the Ancient World, eds. R.H. Meadow and H.-P. Uerpmann, 67-116. Beihefte zum Tubinger Atlas des Vorderen Orients, Reihe A, Nr. 19/1. Wiesbaden: Dr. Ludwig Reichert Verlag.

Eisenmann, V. and S. Beckouche
1986 "Identification and Discrimination of Metapodials from Pleistocene and Modern Equus, Wild and Domestic." In Equids in the Ancient World, eds. R.H. Meadow and H.-P. Uerpmann, 117-163. Beihefte zum Tubinger Atlas des Vorderen Orients, Reihe A, Nr. 19/1. Wiesbaden: Dr. Ludwig Reichert Verlag.

Ellerman, J.R. and T.C.S. Morrison-Scott
1966 Checklist of Palaearctic and Indian Mammals 1758-1946, second edition. London: British Museum (Natural History).

Epstein, H.
1971 The Origins of the Domestic Animals of Africa, Volume 1. New York: Africana Publishing Corp.

Epstein, H. and I.L. Mason
1984 "Cattle." In Evolution of Domestic Animals, ed. I.L. Mason, 6-27. London and New York: Longman.

Fisher, W.B.
1968 "Physical Geography." In The Cambridge History of Iran, I: The Land of Iran, ed. W.B. Fisher, 3-110. Cambridge: The University Press.

Flannery, K.V.
1969 "The Animal Bones." In Prehistory and Human Ecology of the Deh Luran Plain, F. Hole, K.V. Flannery, and J.A. Neely, 262-330. Memoirs of the Museum of Anthropology, University of Michigan, No. 1. Ann Arbor: Museum of Anthropology.
1983 "Early Pig Domestication in the Fertile Crescent: a Retrospective Look." In The Hilly Flanks, eds. T.C. Young, Jr., P.E.L. Smith, and P. Mortensen, 163-188. Studies in Ancient Oriental Civilization 36. Chicago: The Oriental Institute of the University of Chicago.

Flower, W.H.
1885 An Introduction to the Osteology of the Mammalia. London: Macmillan.

Gamble, C.
1978 "Optimising information from studies of faunal remains." In Sampling in Contemporary British Archaeology, ed. J.F. Cherry, C. Gamble, S. Shennan, 321-353. Oxford: BAR British Series 50.

Gebel, H.-G.
1984 Das Akeramische Neolithikum Vorderasiens. Beihefte zum Tubinger Atlas des Vorderen Orients, Reihe B, Nr. 52. Wiesbaden: Dr. Ludwig Reichert.

Getty, R., ed.
1975 Sisson and Grossman's The Anatomy of the Domestic Animals, fifth edition. Philadelphia: W.B. Saunders.

Gifford, D.P.
1981 "Taphonomy and Paleoecology: a Critical Review of Archaeology's Sister Disciplines." In Advances in Archaeological Method and Theory, vol. 4, ed. M.B. Shiffer, 365-438. New York: Academic Press.

Gilbert, A.S.
1979 "Urban Taphonomy of Mammalian Remains from the Bronze Age of Godin Tepe, Western Iran." Ph.D. Dissertation, Faculty of Political Science, Columbia University.

Gordon, B.C.
1984 "Selected Bibliography of Dental Annular Studies on Various Mammals." Zooarchaeological Research News, Supplement 2.

Gray, A.P.
1972 Mammalian Hybrids, second edition. Farnham Royal, Slough: Commonwealth Agricultural Bureaux.

Grayson, D.K.
1984 Quantitative Zooarchaeology. New York: Academic Press.

Grigson, C.
1973 "The Comparative Craniology of Bos taurus L., B.indicus L., B.primigenius Boj., and B.namadicus Falc." Ph.D. Dissertation, University of London.
1976 "The Craniology and Relationships of Four Species of Bos. 3. Basic Craniology: Bos taurus L. Sagittal Profiles and other Non-measurable Characters." Journal of Archaeological Science 3:115-136.
1980 "The Craniology and Relationships of Four Species of Bos. 5. Bos indicus L." Journal of Archaeological Science 7:3-32.
1982 "Sex and Age Determination of some Bones and Teeth of Domestic Cattle: a Review of the Literature." In Ageing and Sexing Animal Bones from Archaeological Sites, eds. B. Wilson, C. Grigson, and S. Payne, 7-23. Oxford: BAR British Series 109.
1982a "Sexing Neolithic Domestic Cattle Skulls and Horncores." In Ageing and Sexing Animal Bones from Archaeological Sites, eds. B. Wilson, C. Grigson, and S. Payne, 25-54. Oxford: BAR British Series 109.
1985 "Bos indicus and Bos namadicus and the Problem of Autochthonous Domestication in India." In Recent Advances in Indo-Pacific Prehistory, eds. V.N. Misra and P. Bellwood, 425-428. New Delhi:Oxford and IBH Publishing Co.

Groves, C.P.
1969 "On the Smaller Gazelles of the Genus Gazella de Blainville, 1816." Zeitschrift fur Saugetierkunde 34:38-60.
1971 "Request for a declaration modifying Article 1 so as to exclude names proposed for domestic animals from zoological nomenclature." Bulletin of Zoological Nomenclature 27:269-272.

1981 Ancestors for the Pigs: Taxonomy and Phylogeny of the Genus Sus. Technical Bulletin 3. Canberra: Department of Prehistory, Research School of Pacific Studies, Australian National University.
1985 "On the Agriotypes of Domestic Cattle and Pigs in the Indo-Pacific Region." In Recent Advances in Indo-Pacific Prehistory, eds. V.N. Misra and P. Bellwood, 429-438. New Delhi: Oxford and IBH Publishing Co.
1986 "The Taxonomy, Distribution, and Adaptations of Recent Equids." In Equids in the Ancient World, eds. R.H. Meadow and H.-P. Uerpmann, 11-65. Beihefte zum Tubinger Atlas des Vorderen Orients, Reihe A, Nr. 19/1. Wiesbaden: Dr. Ludwig Reichert Verlag.

Groves, C.P. and V. Mazak
1967 "On Some Taxonomic Problems of Asiatic Wild Asses with a Description of a New Subspecies (Perissodactyla, Equidae)." Zeitschrift fur Saugetierkunde 32:321-355.

Habermehl, K.-H.
1975 Die Altersbestimmung bei Haus- und Labortieren, 2. Auflage. Berlin: Verlag Paul Parey.

Haltenorth, T. and H. Diller
1977 Saugetiere Afrikas. Munich: BLV Verlagsgesellschaft.

Harris, E.C.
1975 "The Stratigraphic Sequence: a Question of Time." World Archaeology 7: 109-121.
1979 Principles of Archaeological Stratigraphy. London: Academic Press.

Harrison, D.L.
1968 The Mammals of Arabia, Volume 2. London: Ernest Benn.
1972 The Mammals of Arabia, Volume 3. London: Ernest Benn.

Hastings, A.
1980 "A Summary of the IVA Architecture." Appendix 3 in D.T. Potts, "Tradition and Transformation: Tepe Yahya and the Iranian Plateau during the Third Millennium B.C." Ph.D. Dissertation, Department of Anthropology, Harvard University.

Hatting, T.
1975 "The Influence of Castration on Sheep Horns." In Archaeozoological Studies, ed. A.T. Clason, 345-351. Amsterdam: North Holland Publishing.

Hawes, R.O.
1984 "Pigeons." In Evolution of Domestic Animals, ed. I.L. Mason, 351-356. London and New York: Longman.

Heany, G.F.
1944 "Occurrence of the Lion in Persia." Journal of the Bombay Natural History Society 44:467.

Hesse, B.
1978 "Evidence for Husbandry from the Early Neolithic Site of Ganj Dareh in Western Iran." Ph.D. Dissertation, Faculty of Political Science, Columbia University
1984 "These Are Our Goats: the Origins of Herding in West Central Iran." In Animals and Archaeology: 3. Early Herders and their Flocks, ed. J. Clutton-Brock and C. Grigson, 243-264. Oxford: BAR S202.

Hesse, B. and P. Wapnish
1985 Animal Bone Archeology. Manuals on Archeology 5. Washington, D.C.: Taraxacum.

Higham, C.
1967 "Stock Rearing as a Cultural Factor in Prehistoric Europe." Proceedings of the Prehistoric Society 33:84-103.
1968 "Trends in Prehistoric European Caprovine Husbandry." Man (n.s.) 3(1):64-75.
1969 "The Metrical Attributes of Two Samples of Bovine Limb Bones." Journal of Zoology (London) 157:63-74.
1975 Non Nok Tha: The Faunal Remains from the 1966 and 1968 Excavations at Non Nok Tha, Northeastern Thailand. Otago University Studies in Prehistoric Archaeology 7. Otago: Department of Anthropology, University of Otago.

Higham, C. and M. Message
1969 "An Assessment of a Prehistoric Technique of Bovine Husbandry." In Science in Archaeology, second edition, ed. D. Brothwell and E.S. Higgs, 315-330. London: Thames and Hudson.

Hulet, C.V., G. Alexander, and E.S.E. Hafez
1975 "The Behaviour of Sheep." In The Behaviour of Domestic Animals, third edition, ed. E.S.E. Hafez, 246-294. London: Bailliere Tindall.

Hsu, T.C. and K. Benirschke
1968 "Order: Artiodactyla, Family: Bovidae, Bos indicus (Zebu)." In An Atlas of Mammalian Chromosomes, T.C. Hsu and Benirschke, Volume 2, Folio 90. New York: Springer-Verlag.

Hue, F. and R.D. Etchecopar
1970 Les Oiseaux du Proche et du Moyen Orient. Paris: Editions N. Boubee.

ICZN
1985 International Code of Zoological Nomenclature, third edition, adopted by the XX General Assembly of the International Union of Biological Sciences. London: International Trust for Zoological Nomenclature in association with the British Museum (Natural History).

Jarrige, J.-F.
1986 "Continuity and Change in the North Kachi Plain (Baluchistan, Pakistan) at the Beginning of the Second Millennium B.C." In South Asian Archaeology 1983, ed. J. Schotsmans and M. Taddei. Naples: Istituto Universitario Orientale, Dipartimento di Studi Asiatici.

Kenyon, K.M.
1957 Beginning in Archaeology. New York: Praeger.

Kieffer, N.M. and T.C. Cartwright
1968 "Sex Chromosome Polymorphism in Domestic Cattle." The Journal of Heredity 59(1):35-36.

Klein, R.G., K. Allwarden, and C. Wolf
1983 "The Calculation and Interpretation of Ungulate Age Profiles from Dental Crown Heights." In Hunter-Gatherer Economy in Prehistory: a European Perspective, ed. G. Bailey, 47-57. Cambridge: The University Press.

Klein, R.G. and K. Cruz-Uribe
1983 "The Computation of Ungulate Age (Mortality) Profiles from Dental Crown Heights." Paleobiology 9:70-78.
1984 The Analysis of Animal Bones from Archeological Sites. Chicago: The University of Chicago Press.

Kohl, P.L.
1974 "Seeds of Upheaval: the Production of Chlorite at Tepe Yahya and an Analysis of Commodity Production and Trade in Southwest Asia in the Mid-Third Millennium." Ph.D. Dissertation, Department of Anthropology, Harvard University.
1975 "Carved Chlorite Vessels: a Trade in Finished Commodities in the Mid-Third Millennium." Expedition 18(1):18-31.
1978 "The Balance of Trade in Southwestern Asia in the Mid-Third Millennium B.C." Current Anthropology 19:463-492.
1979 "The 'World Economy' of West Asia in the Third Millennium B.C." In South Asian Archaeology 1977, ed. M. Taddei, 55-85. Naples: Istituto Universitario Orientale, Seminario di Studi Asiatici.

Kratochvil, Z.
1969 "Species Criteria on the Distal Section of the Tibia in Ovis ammon f. aries L. and Capra aegagrus f. hircus L." Acta Veterinaria (Brno) 38:483-490.

Kusatman, B.
1983 "The Small Mammal Remains from Cayonu." M.Sc. Thesis, Institute of Archaeology, University of London.

Kutzbach, J.E.
1981 "Monsoon Climate of the Early Holocene: Climate Experiment with the Earth's Orbital Parameters for 9000 Years Ago." Science 214:59-61.

Kutzbach, J.E. and F.A. Street-Perrott
1985 "Milankovitch Forcing of Fluctuations in the Level of Tropical Lakes from 18 to 0 kyr BP." Nature 317(6033): 130-134.

LaBianca, O.S.
1978 "The Logistic and Strategic Aspects of Faunal Analysis in Palestine." In Approaches to Faunal Analysis in the Middle East, ed. R.H. Meadow and M.A. Zeder, 3-9. Peabody Museum Bulletin 2. Cambridge: Peabody Museum, Harvard University.

Ladjevardi, Y.
1976 "Baghun Valley Survey, Tepe Yahya, August 1975." Paper on file with C.C. Lamberg-Karlovsky, Department of Anthropology, Harvard University.

Laffer, J.P.
1983 "The Faunal Remains from Banahilk." In Prehistoric Archeology along the Zagros Flank, ed. L.S. Braidwood et al., 629-647. Oriental Institute Publications 105. Chicago: The Oriental Institute of the University of Chicago.

Lamberg-Karlovsky, C.C.
1968 "Survey and Excavations in the Kirman Area." Iran 6: 167-168.
1969 "Tepe Yahya." Iran 7:184-186.
1970 "Tepe Yahya." Iran 8:197-199.
1970a Excavations at Tepe Yahya, Iran, 1967-1969: Progress Report I. American School of Prehistoric Research, Bulletin 27. Cambridge: Peabody Museum, Harvard University.
1971 "The Proto-Elamite Settlement at Tepe Yahya." Iran 9:87-96.
1971a "The Yahya Project: Tepe Yahya and Dasht-i Deh." Iran 9:182-183.
1972 "Tepe Yahya 1971: Mesopotamia and the Indo-Iranian Borderlands." Iran 10:89-100.
1972a "Trade Mechanisms in Indus-Mesopotamian Interrelations." Journal of the American Oriental Society 92:222-229.
1973 "Urban Interaction on the Iranian Plateau: Excavations at Tepe Yahya 1967-1973." Albert Reckitt Archaeological Lecture, British Academy, 1973. Proceedings of the British Academy 59:282-319. London: Oxford University Press.
1974 "Tepe Yahya." Iran 12:228-231.
1976 "Tepe Yahya Project." Iran 14:172.

1977 "Foreign Relations in the Third Millennium at Tepe Yahya." In Le Plateau Iranien et l'Asie Centrale des Origines a la Conquete Islamique, 33-43. Paris: Colloques Internationaux du C.N.R.S. No. 567.

1978 "The Proto-Elamites on the Iranian Plateau." Antiquity 52:114-120.

1986 "The Tepe Yahya Project, 1967-1975." In Excavations at Tepe Yahya, Iran, 1967-1975: The Early Periods, 1-10. American School of Prehistoric Research, Bulletin 38. Cambridge: Peabody Museum, Harvard University.

Lamberg-Karlovsky, C.C. and T.W. Beale
1986 "Conclusion: Tepe Yahya in the Context of a Wider Core-Periphery Interaction Sphere in the Fifth and Fourth Millennia B.C." In Excavations at Tepe Yahya, Iran, 1967-1975: The Early Periods, 265-268. American School of Prehistoric Research, Bulletin 38. Cambridge: Peabody Museum, Harvard University.

Lamberg-Karlovsky, C.C. and R.H. Meadow
1970 "A Unique Female Figurine: the Neolithic at Tepe Yahya." Archaeology 23(1):12-17.

Lamberg-Karlovksy, C.C. and M. Tosi
1973 "Shahr-i Sokhta and Tepe Yahya: Tracks on the Earliest History of the Iranian Plateau." East and West (n.s.) 23:21-57.

Lange, J.
1972 "Studien an Gazellenschadeln. Ein Beitrag zur Systematik der kleineren Gazellen, Gazella (De Blainville, 1816)." Saugetierkundliche Mitteilungen 20:193-249.

Lawrence, B.
1968 "Antiquity of Large Dogs in North America." Tebiwa, Journal of the Idaho State University Museum 11(2):43-49.

1980 "Evidences of Animal Domestication at Cayonu." In Prehistoric Research in Southeastern Anatolia: I, ed. Halet Cambel and R.J. Braidwood, 285-308. Istanbul: Edebiyat Fakultesi Basimevi.

Lawrence, B. and C.A. Reed
1983 "The Dogs of Jarmo." In Prehistoric Archeology along the Zagros Flank, ed. L.S. Braidwood et al., 485-494. Oriental Institute Publications 105. Chicago: The Oriental Institute of the University of Chicago.

Lay, D.M.
1967 "A Study of the Mammals of Iran." Fieldiana: Zoology 54: 1-282.

Lemppenau, U.
1964 "Geschlechts- und Gattungsunterschiede am Becken mitteleuropaischer Wiederkauer." Munich: Aus dem Tieranatomischen Institut der Universitat Munchen.

Lundholm, B.
1949 "Abstammung und Domestikation des Hauspferdes." Zoologiska Bidrag fran Uppsala 27:1-287.

Lydekker, R.
1912 The Ox and its Kindred. London: Methuen.

Mackay, E.J.H.
1937 Further Excavations at Mohenjo-daro. Delhi: Manager of Publication, Government of India.

Maltby, M.
1979 Faunal Studies on Urban Sites: the Animal Bones from Exeter, 1971-1975. Exeter Archaeological Reports 2. Sheffield: Department of Prehistory and Archaeology, Univ. of Sheffield.

Masson, V.M. and V.I. Sarianidi
1972 Central Asia: Turkmenia before the Achaemenids. London: Thames and Hudson.

Mayer, E.
1969 Principles of Systematic Zoology. New York: McGraw Hill.

Meadow, R.H.
1968 "Survey 1967: The 1967 Harvard University Archaeological Expedition to Southeastern Iran and a General Consideration of Iranian Prehistory." B.A. honors thesis, Department of Anthropology, Harvard University.
1975 "Mammal Remains from Hajji Firuz: a Study in Methodology." In Archaeozoological Studies, ed. A.T. Clason, 265-283. Amsterdam: North Holland Publishing.
1976 "Methodological Concerns in Zoo-Archaeology." In Themes specialises, Pretirage, 108-123. Nice: UISPP (Union internationale des Sciences prehistoriques et proto-historiques), IXe Congres.
1978 "'BONECODE' - a System of Numerical Coding for Faunal Data from Middle Eastern Sites." In Approaches to Faunal Analysis in the Middle East, ed. R.H. Meadow and M.A. Zeder, 169-186. Peabody Museum Bulletin 2. Cambridge: Peabody Museum, Harvard University.
1978a "Effects of Context on the Interpretation of Faunal Remains: a Case Study." In Approaches to Faunal Analysis in the Middle East, ed. R.H. Meadow and M.A. Zeder, 15-21. Peabody Museum Bulletin 2. Cambridge: Peabody Museum, Harvard University.

1979 "Prehistoric Subsistence at Balakot: Initial Consideration of the Faunal Remains." In South Asian Archaeology 1977, ed. M. Taddei, 275-315. Naples: Istituto Universitario Orientale, Seminario di Studi Asiatici.

1980 "Animal Bones: Problems for the Archaeologist Together with Some Possible Solutions." Paleorient 6:65-77.

1981 "Early Animal Domestication in South Asia: a First Report of the Faunal Remains from Mehrgarh, Pakistan." In South Asian Archaeology 1979, ed. H. Hartel, 143-179. Berlin: Dietrich Reimer Verlag.

1983 "The Vertebrate Faunal Remains from Hasanlu Period X at Hajji Firuz." Appendix G in M.M. Voigt, Hasanlu Excavation Reports, Vol. I: Hajji Firuz Tepe, Iran: The Neolithic Settlement, 369-422. Philadelphia: The University Museum.

1984 "Notes on the Faunal Remains from Mehrgarh, Pakistan, with a Focus on Cattle (Bos)." In South Asian Archaeology 1981, ed. B. Allchin, 34-40. Cambridge: The University Press.

1984a "Animal Domestication in the Middle East: a View from the Eastern Margin." In Animals and Archaeology: 3. Early Herders and their Flocks, ed. J. Clutton-Brock and C. Grigson, 309-337. Oxford: BAR S202.

1986 "The Geographical and Paleoenvironmental Setting of Tepe Tepe Yahya." In Excavations at Tepe Yahya, Iran, 1967-1975: The Early Periods, 21-38. American School of Prehistoric Research, Bulletin 38. Cambridge: Peabody Museum, Harvard University.

1986a "Some Equid Remains from Cayonu, Southeastern Turkey." In Equids in the Ancient World, ed. R.H. Meadow and H.-P. Uerpmann, 266-301. Beihefte zum Tubinger Atlas des Vorderen Orients, Reihe A, Nr. 19/1. Wiesbaden: Dr. Ludwig Reichert Verlag.

in press "Faunal Exploitation Patterns in Eastern Iran and Baluchistan: a Review of Recent Investigations." In Orientalia Iosephi Tucci Memoriae Dictata, ed. G. Gnoli. Serie Orientale Roma 56. Rome: Istituto Italiano per il Medio ed Estremo Oriente.

Meadow, R.H. and H.-P. Uerpmann, eds.
1986 Equids in the Ancient World. Beihefte zum Tubinger Atlas des Vorderen Orients, Reihe A, Nr. 19/1. Wiesbaden: Dr. Ludwig Reichert Verlag.

Meek, R. and A.S. Jayes
1982 "Body Temperature and Activity Patterns of Testudo graeca in Northwest Africa." British Journal of Herptology 6:194-197.

Missone, X.
1959 Analyse Zoogeographique des Mammiferes de l'Iran. Memoires deuxieme serie, fasc. 59. Bruxelles: Institut Royal des Sciences Naturelles de Belgique.

Noddle, B.
1974 "Ages of Epiphyseal Closure in Feral and Domestic Goats and Ages of Dental Eruption." Journal of Archaeological Science 1:195-204.

Payne, S.
1972 "Partial Recovery and Sample Bias: the Results of Some Sieving Experiments." In Papers in Economic Prehistory, ed. E.S. Higgs, 49-64. Cambridge at the University Press.
1973 "Kill-off Patterns in Sheep and Goats: the Mandibles from Asvan Kale." Anatolian Studies 23:281-303.
1985 "Morphological Distinctions between the Mandibular Teeth of Young Sheep, Ovis, and Goats, Capra. Journal of Archaeological Science 12:139-147.

Perkins, D., Jr.
1969 "Fauna of Catal Huyuk: Evidence for Early Cattle Domestication in the Prehistoric Near East." Science 164:177-179.
1973 "A Critique of the Methods of Quantifying Faunal Remains from Archaeological Sites." In Domestikationsforschung und Geschichte der Haustiere, J. Matolcsi, ed., 367-369. Budapest: Akademiai Kiado.

Peters, J.L. and others, eds.
1934-1979 Check-list of Birds of the World, 15 volumes. Cambridge: Harvard University Press and Museum of Comparative Zoology.

Piperno, M.
1973 "The Lithic Industry of Tepe Yahya, a Preliminary Typological Analysis." East and West (n.s.) 23:59-74.

Potts, D.T.
1975 "The Late 4th Millennium Universe of a Highland Community in Iran: Problems of Proto-Elam and Jamdat Nasr Mesopotamia." B.A. honors thesis, Department of Anthropology, Harvard University.
1977 "Tepe Yahya and the End of the 4th Millennium on the Iranian Plateau." In Le Plateau Iranien et l'Asie Centrale des Origines a la Conquete Islamique, 23-31. Paris: Colloques Internationaux du C.N.R.S. No. 567.
1980 "Tradition and Transformation: Tepe Yahya and the Iranian Plateau during the Third Millennium B.C." Ph.D. Dissertation, Department of Anthropology, Harvard University.

Prickett, M.E.
1976 "Tepe Yahya Project: Upper Rud-i Gushk Survey." Iran 14:175-176.
1979 "Settlement and the Development of Agriculture in the Rud-i Gushk Drainage, Southeastern Iran." In Akten des VII. Internationalen Kongresses fur Iranische Kunst und Archaologie; Archaologische Mitteilungen aus Iran 6:47-56. Berlin.
1986 "Settlement during the Early Periods." In Excavations at Tepe Yahya, Iran, 1967-1975: The Early Periods, 215-246. American School of Prehistoric Research, Bulletin 38. Cambridge: Peabody Museum, Harvard University.
1986a "Man, Land and Water: Settlement Distribution and the Development of Irrigation Agriculture in the Upper Rud-i Gushk Drainage, Southeastern Iran." Ph.D. Dissertation, Department of Anthropology, Harvard University.

Rauh, H.
1981 "Knochenfunde von Saugetieren aus dem Demircihuyuk (Nordwestanatolien)." Inaugural-Dissertation, Universitat Munchen, Institut fur Palaeoanatomie, Domestikationsforschung und Geschichte der Tiermedizin.

Redding, R.W., Jr.
1981 "Decision Making in Subsistence Herding of Sheep and Goats in the Middle East." Ph.D. Dissertation, Departments of Anthropology and Biological Sciences, University of Michigan, Ann Arbor.
1984 "Theoretical Determinants of a Herder's Decisions: Modeling Variation in the Sheep/Goat Ratio." In Animals and Archaeology: 3. Early Herders and their Flocks, ed. J. Clutton-Brock and C. Grigson, 223-241. Oxford: BAR S202.

Rhoad, A.O.
1949 "The Santa Gertrudis Breed." The Journal of Heredity 40:115-126.

Roberts, T.J.
1977 The Mammals of Pakistan. London: Ernest Benn.

Rutimeyer, L.
1877/8 "Die Rinder der Tertiar-Epoche." Abhandlungen der schweizerischen palaontologischen Gesellschaft 4/5:1-208.

Sadek-Kooros, H.
1966 "Jaguar Cave: an Early Man Site in the Beaverhead Mountains of Idaho." Ph.D. Dissertation, Department of Anthropology, Harvard University.
1972 "Primitive Bone Fracturing: A Method of Research." American Antiquity 37:369-382.

1975 "Intentional Fracturing of Bone: Discription of Criteria." In Archaeozoological Studies, ed. A.T. Clason, 139-150. Amsterdam: North Holland Publishing.

Schindler, A.H.
1881 "Reisen im sudlichen Persien 1879." Zeitschrift der Gesellschaft fur Erdkunde zu Berlin 16:307-366.

Schmid, E.
1972 Atlas of Animal Bones // Tierknochenatlas. Amsterdam: Elsevier/North Holland.

Sherratt, A.
1980 "Water, Soil and Seasonality in Early Cereal Cultivation." World Archaeology 11:313-330.
1981 "Plough and Pastoralism: Aspects of the Secondary Products Revolution." In Pattern of the Past, ed. I. Hodder, G. Isaac, and N. Hammond, 261-305. Cambridge: The University Press.

Shiffer, M.B.
1972 "Archaeological Context and Systemic Context." American Antiquity 37:156-165.
1976 Behavioral Archeology. New York: Academic Press.

Siegel, J.
1976 "Animal Palaeopathology: Possibilities and Problems." Journal of Archaeological Science 3:349-384.

Silver, I.A.
1963 "The Ageing of Domestic Animals." In Science in Archaeology, ed. D. Brothwell and E. Higgs, 250-268. London: Thames and Hudson.
1969 "The Ageing of Domestic Animals." In Science in Archaeology, second edition, ed. D. Brothwell and E.S. Higgs, 283-302. London: Thames and Hudson.

Simpson, G.G.
1941 "Explanation of Ratio Diagrams." American Museum Novitates 1136:23-25.

Simpson, G.G., A. Roe, R.C. Lewontin
1960 Quantitative Zoology, revised edition. New York: Harcourt, Brace and World.

Snead, R.E. and P. Durgin
1975 "The Physical Geography of the Soghun Valley, Southeastern Iran." Report on file with C.C. Lamberg-Karlovsky, Department of Anthropology, Harvard University.

Stallibrass, S.
1982 "The Use of Cemet Layers for Absolute Ageing of Mammalian Teeth: a Selective Review of the Literature, with Suggestions for Further Studies and Alternative Applications." In Ageing and Sexing Animal Bones from Archaeological Sites, ed. B. Wilson, C. Grigson, and S. Payne, 109-140. Oxford: BAR British Series 109.

1983 "A Bifid Thoracic Vertebral Spine from a Bovine in the Roman Fenland." Journal of Archaeological Science 10:265-266.

Stampfli, H.R.
1963 "Wisent, Bison bonasus (Linne, 1758), Ur, Bos primigenius Bojanus, 1827, und Hausrind, Bos taurus Linne, 1758." In Seeberg Burgaschisee-Sud, Teile 3, Die Tierreste, J. Boessneck, J.-P. Jequier, and H.R. Stampfli, 117-196. Acta Bernensia II. Bern: Verlag Stampfli & Cie.
1983 "The Fauna of Jarmo with Notes on Animal Bones from Matarrah, the 'Amuq, and Karim Shahir." In Prehistoric Archeology along the Zagros Flank, ed. L.S. Braidwood et al., 431-483. Oriental Institute Publications 105. Chicago: The Oriental Institute of the University of Chicago.

Stehlin, H.G. and P. Graziosi
1935 "Richerche sugli Asinidi fossili d'Europa." Memoires de la Societe Paleontologique Suisse 56:1-73.

Swain, A.M., J.E. Kutzbach, and S. Hastenrath
1983 "Estimates of Holocene Precipitation for Rajasthan, India, Based on Pollen and Lake-Level Data." Quaternary Research 19:1-17.

Tosi, M.
1968 "Excavations at Shahr-i Sokhta, a Chalcolithic Settlement in the Iranian Sistan. Preliminary Report on the First Campaign, October-December 1967." East and West (n.s.) 18: 9-66.
1969 "Excavations at Shahr-i Sokhta. Preliminary Report on the Second Campaign, September-December 1968." East and West (n.s.) 19:283-386.
1983 "Development, Continutiy, and Cultural Change in the Stratigraphical Sequence of Shahr-i Sokhta." In Prehistoric Sistan 1, ed. M. Tosi, 127-180. Rome: Istituto Italiano per il Medio ed Estremo Oriente.

Thesing, R.
1977 "Die Grossenentwicklung des Haushuhns in vor- und fruhgeschichtlicher Zeit." Inaugural-Dissertation, Universitat Munchen, Institut fur Palaeoanatomie, Domestikationsforschung und Geschichte der Tiermedizin.

Tosi, M.
1976 "Tepe Yahya Project: Palaeobotanical Survey." Iran 14: 173-174.

Turnbull, P.F.
1986 "Measurements of Equus hemionus from Palegawra Cave (Zarzian, Iraq)." In Equids in the Ancient World, ed. R.H. Meadow and H.-P. Uerpmann, 319-365. Beihefte zum Tubinger Atlas des Vorderen Orients, Reihe A, Nr. 19/1. Wiesbaden: Dr. Ludwig Reichert Verlag.

Turnbull, P.F. and C.A. Reed
1974 "The Fauna from the Terminal Pleistocene of Palegawra Cave: a Zarzian Occupation Site in Northeastern Iraq." Fieldiana: Anthropology 63:81-146.

Uerpmann, H.-P.
1973 "Animal Bone Finds and Economic Archaeology: a Critical Study of 'Osteoarchaeological' Method." World Archaeology 4: 307-322.
1978 "The 'Knocod' System for Processing Data on Animal Bones from Archaeological Sites." In Approaches to Faunal Analysis in the Middle East, ed. R.H. Meadow and M.A. Zeder, 149-167. Peabody Museum Bulletin 2. Cambridge: Peabody Museum, Harvard University.

1979 Probleme der Neolithisierung des Mittelmeerraums. Beihefte zum Tubinger Atlas des Vorderen Orients, Reihe B, Nr. 28. Wiesbaden: Dr. Ludwig Reichert.

UNESCO/FAO
1969 "Vegetation Map of the Mediterranean Zone" (2 Maps and Explanatory Notes). Paris: UNESCO/FAO.

Valdez, R. and L.V. Alamia
1977 "Fecund Mouflon." Natural History 86(9):72-77.

Vigne, J.-D. and M.-C. Marinval-Vigne
1983 "Methode pour la Mise en Evidence de la Consummation du petit Gibier." In Animals and Archaeology: 1. Hunters and their Prey, ed. J. Clutton-Brock and C. Grigson, 239-242. Oxford: BAR S163.

Voigt, M.M.
1983 Hasanlu Excavation Reports, Vol. I: Hajji Firuz Tepe, Iran: The Neolithic Settlement. Philadelphia: The University Museum.

Watson, J.P.N.
1978 "The Interpretation of Epiphyseal Fusion Data." In Research Problems in Zooarchaeology, ed. D.R. Brothwell, K.D. Thomas, and J. Clutton-Brock, 97-101. University of London, Institute of Archaeology, Occasional Publication 3. London: Institute of Archaeology.
1979 "The Estimation of the Relative Frequencies of Mammalian Species: Khirokitia 1972." Journal of Archaeological Science 6:127-137.

Wheeler, M.
1954 Archaeology from the Earth. Oxford: Oxford University Press.

Wilson, B., C. Grigson, and S. Payne, eds.
1982 Ageing and Sexing Animal Bones from Archaeological Sites. Oxford: BAR British Series 109.

Wing, E.S. and A.B. Brown
1979 Paleonutrition. New York: Academic Press.

Zeder, M.A.
1984 "Meat Distribution at the Highland Iranian Urban Center of Tal-e Malyan." In Animals and Archaeology: 3. Early Herders and their Flocks, ed. J. Clutton-Brock and C. Grigson, 279-307. Oxford: BAR S202.
1985 "Urbanism and Animal Exploitation in Southwest Highland Iran 3400-1500 B.C." Ph.D. Dissertation, Department of Anthropology, University of Michigan, Ann Arbor.

Zeuner, F.E.
1955 "The Goats of Early Jericho." Palestine Exploration Quarterly, April, 70-86.
1963 A History of Domesticated Animals. London: Hutchinson.
1963a "The History of the Domestication of Cattle." In Man and Cattle, ed. A.E. Mourant and F.E. Zeuner, 9-15. London: Royal Anthropological Institute of Great Britain and Ireland.

Zohary, M.
1973 Geobotanical Foundations of the Middle East. Stuttgart: Gustav Fischer Verlag.

ADDENDUM:

Blalock, H.M., Jr.
1972 Social Statistics. New York: McGraw Hill.

FIGURES

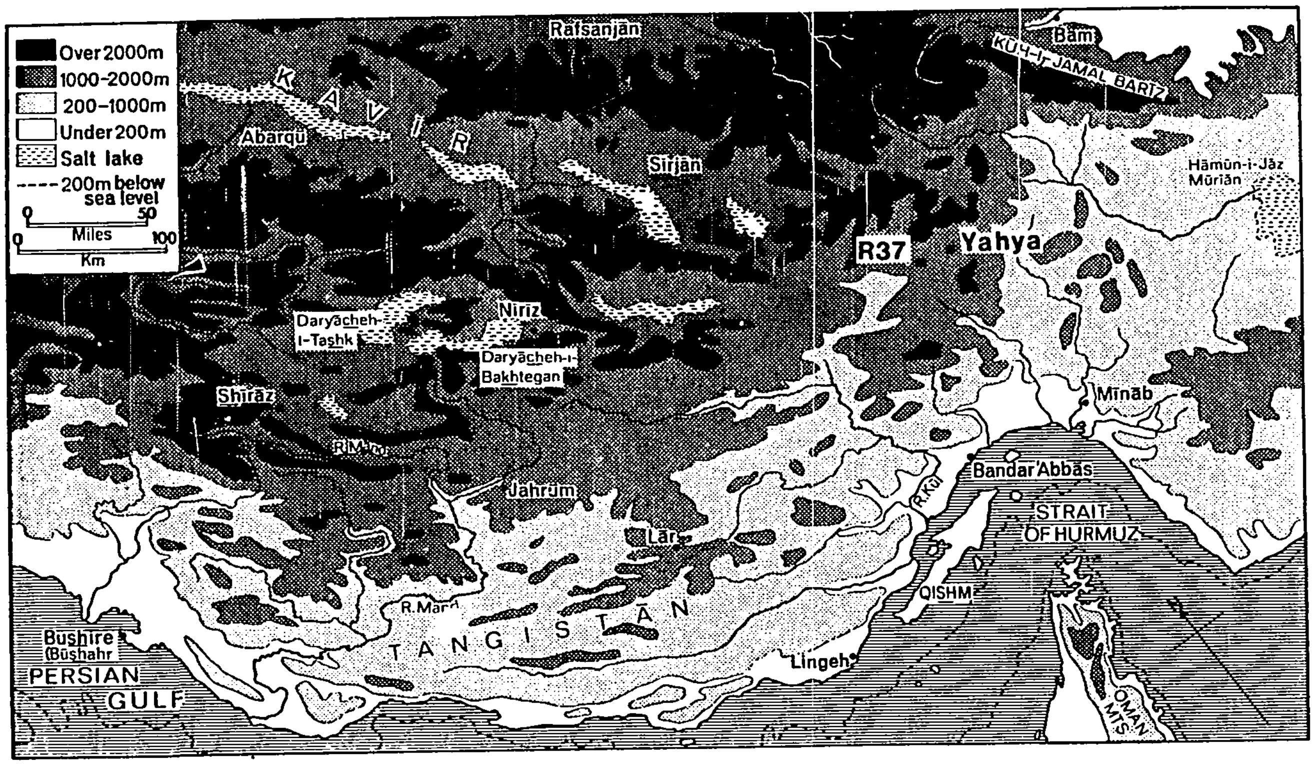


FIGURE 2.1: Map of the southern Zagros, Iran (after Fisher (1968: fig. 9)).

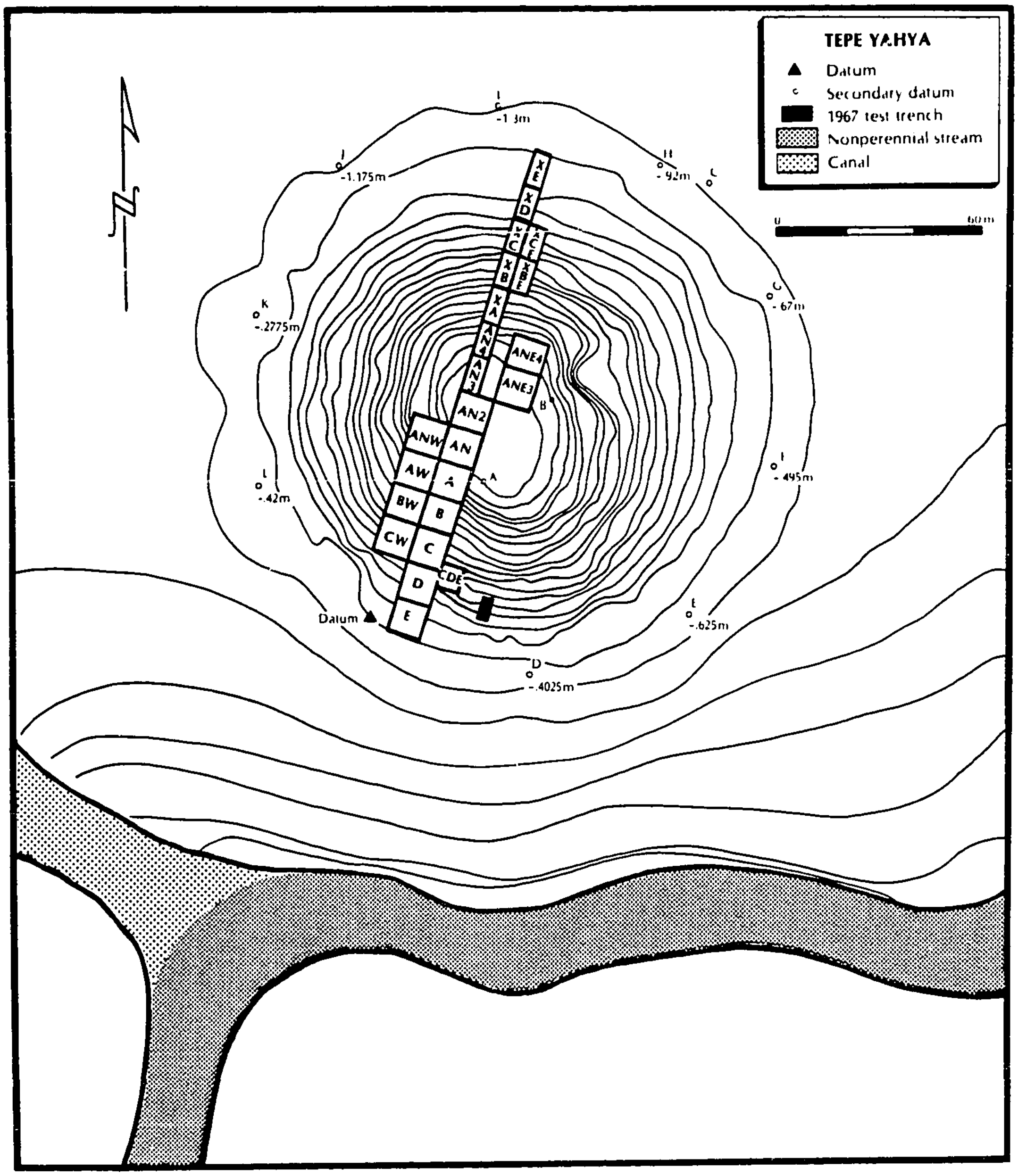


FIGURE 2.2: Map of Tepe Yahya (from Beale <u>et al.</u> (1986: fig. 2.5)).

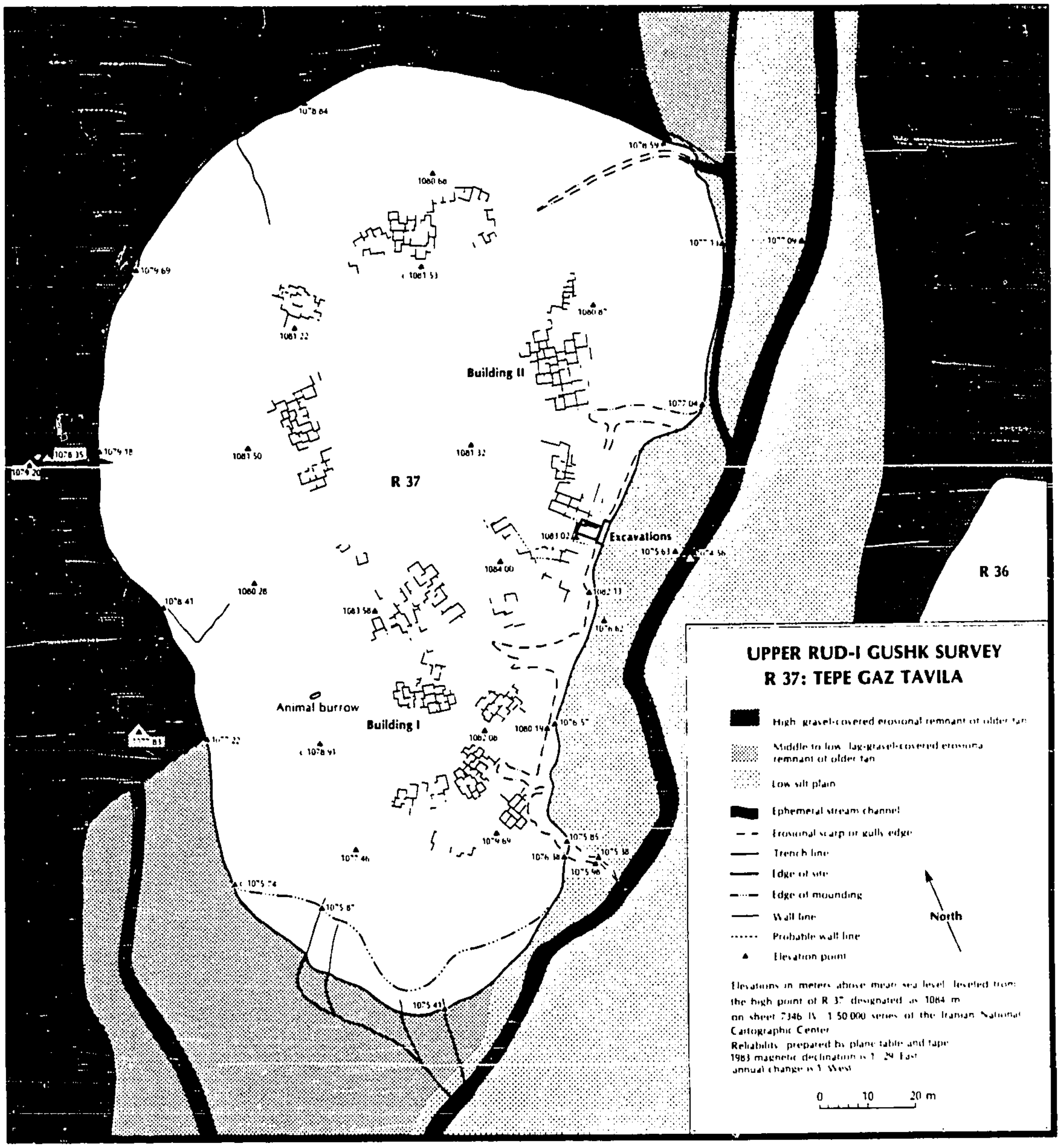
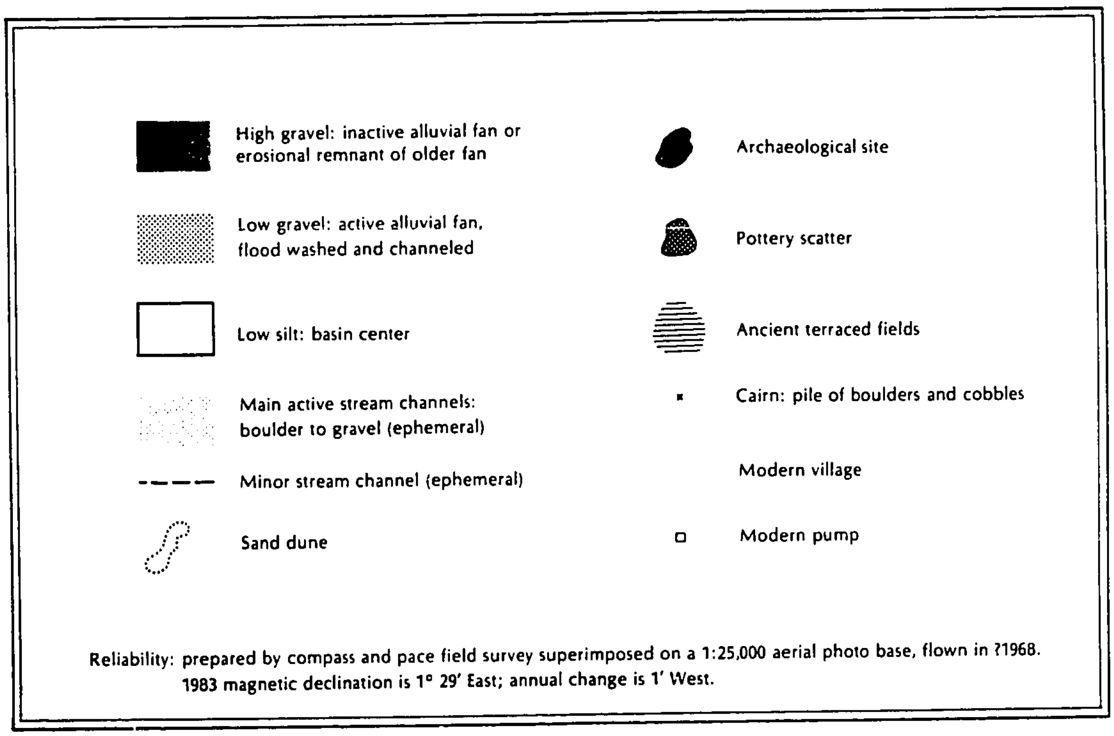
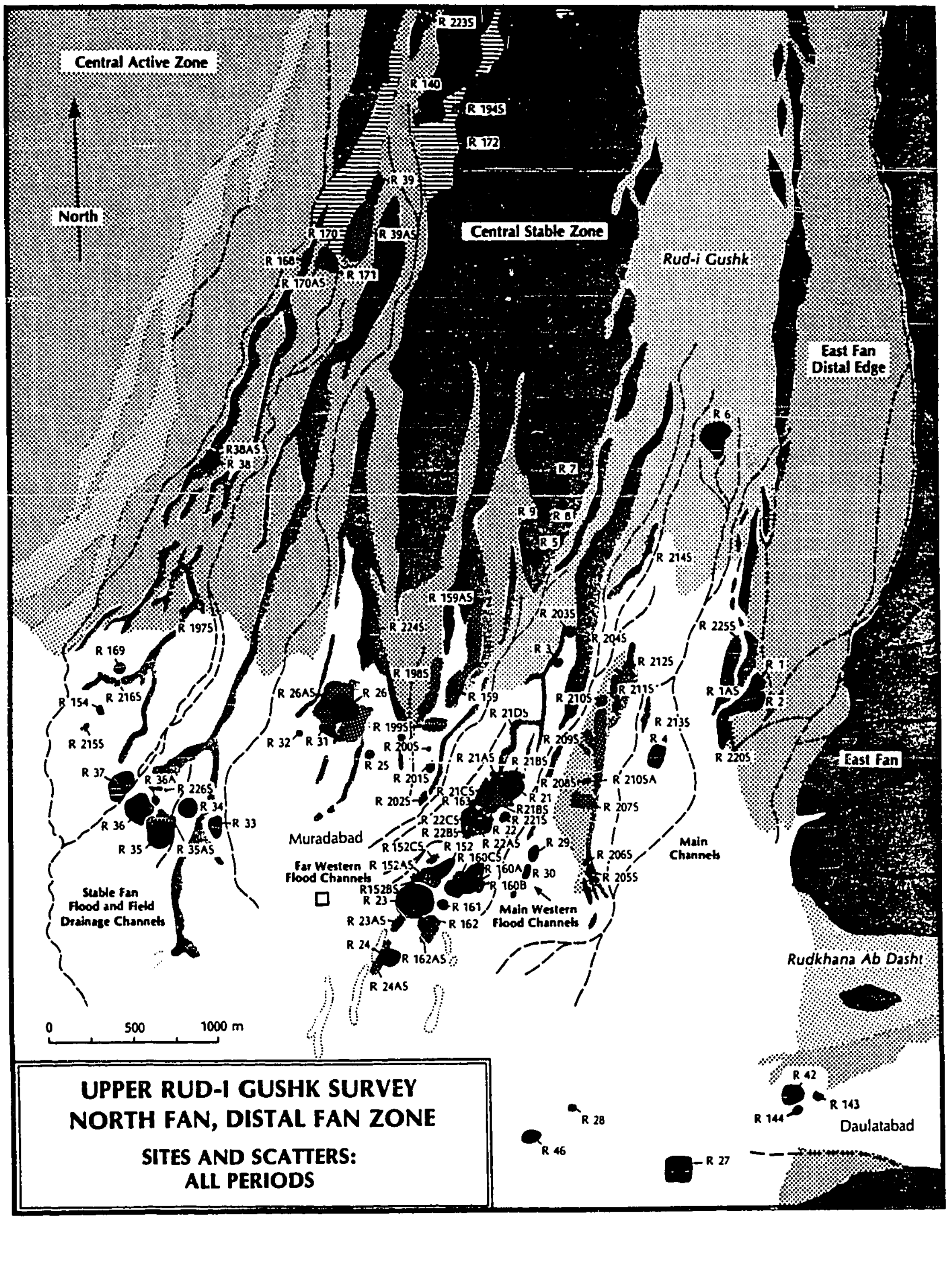


FIGURE 2.3: Map of Tepe Gaz Tavila-R37 (from Beale <u>et al.</u> (1986: fig. 9.4)).

FIGURE 2.4: Map of the Shah Maran-Daulatabad basin, eastern end, north fan and fan toe (from Beale et al. (1986: fig. 9.2)).





Central Active Zone
North
Central Stable Zone
Rud-i Gushk
East Fan Distal Edge
East Fan
Main Channels
Muradabad
Far Western Flood Channels
Main Western Flood Channels
Stable Fan Flood and Field Drainage Channels
Rudkhana Ab Dasht
Daulatabad
0 500 1000 m
UPPER RUD-I GUSHK SURVEY
NORTH FAN, DISTAL FAN ZONE
SITES AND SCATTERS: ALL PERIODS

FIGURE 2.4-2

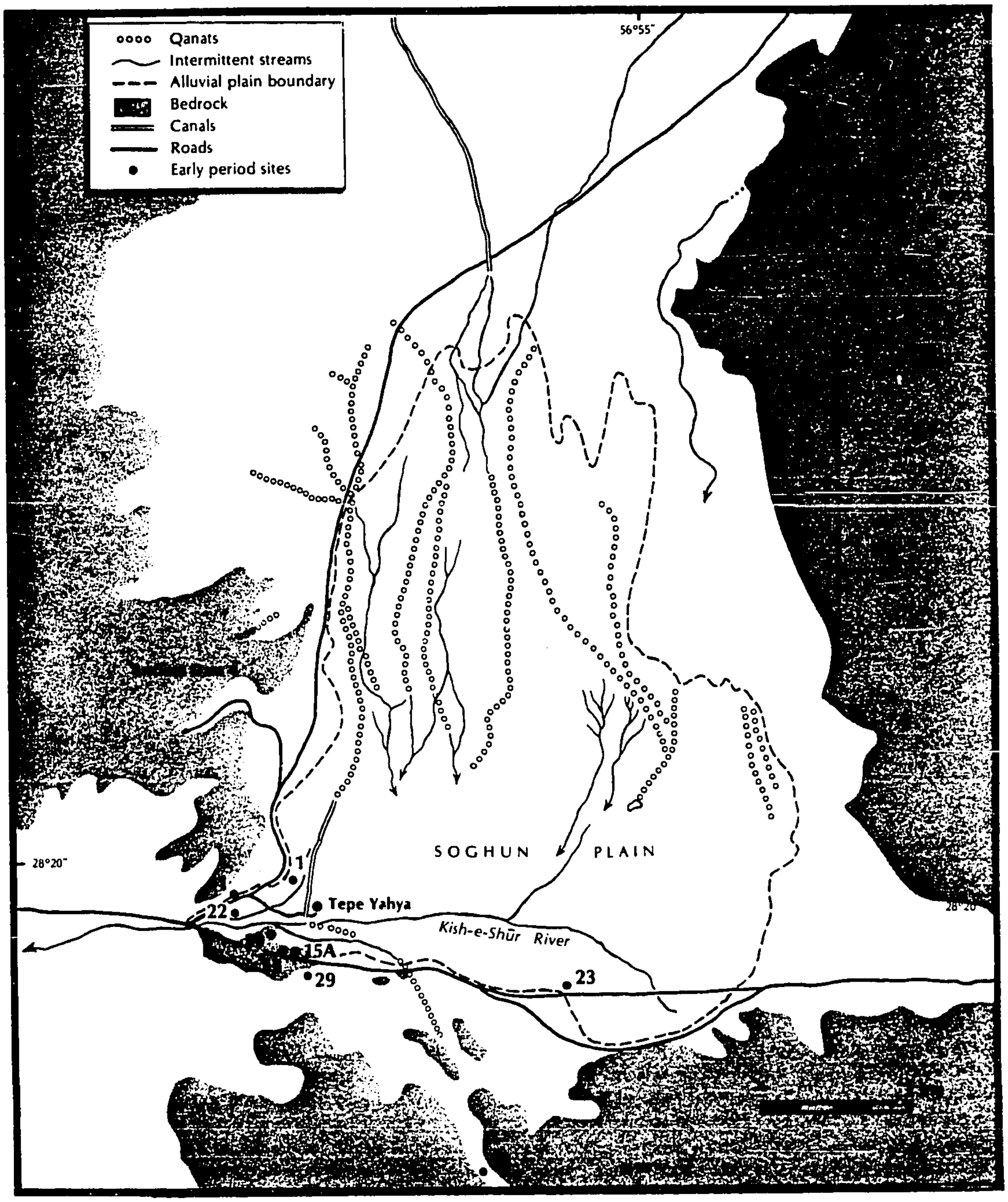


FIGURE 2.5: Drainage map of Soghun valley showing location of early sites (from Beale <u>et al.</u> (1986: fig. 2.3)).

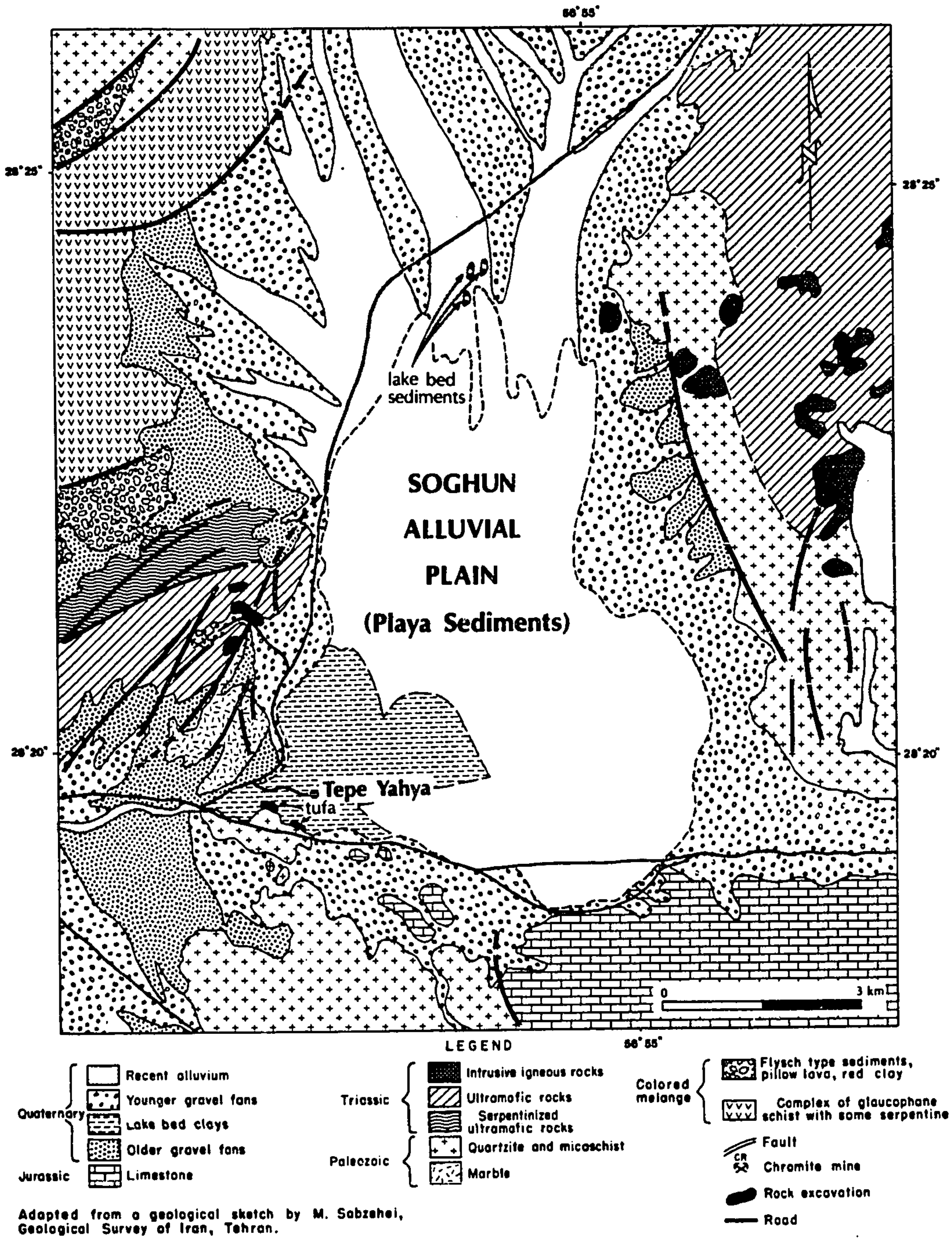


FIGURE 2.6: Map of geological and structural features of the Soghun valley (from Beale et al. (1986: fig. 3.1)).

FIGURE 4.1

Ratio diagram for _Canis_ sp. bones and teeth from Tepe Yahya and Tepe Gaz Tavila-R37

Notes: standard = MCZ 51602: _Canis lupus pallipes_ from near Ergani, Turkey (see section 4.4.4.1.);

Key: mandible: Tepe Yahya 856-7 (Period VIA)
dimension **A**: P/2 crown length
B: P/2 crown breadth
C: P/2 alveolar length
D: P/1-P/2 alveolar length
E: M/2-M/3 alveolar length
F: length of ascending ramus
G: height from condylar to angular process
H: breadth of condylar process
I: greatest thickness of ascending ramus
J: greatest thickness of horizontal ramus at M/1
K: least thickness of horizontal ramus in area of premolars
L: least thickness at symphysis
M: least horizontal ramus height behind M/3
N: horizontal ramus height between M/1 and M/2
O: horizontal ramus height between P/2 and P/3;

vertebra: 6th cervical: R37 3550-3
dimension **P**: breadth of cranial articular surface
Q: height of cranial articular surface;

ulna: proximal: Tepe Yahya 813-7 (Period VIIC.1)
dimension **R**: depth across processus anconaeus;

tibia: shaft: Tepe Yahya 1347-1 (Period VB)
dimension **S**: smallest diameter of shaft;

phalanx 1: Tepe Yahya 1326-13 (Period VA.1)
dimension **T**: greatest length
U: proximal breadth
range in diagram reflects range of dimensions in the standard for phalanges of digit III or IV, anterior and posterior;

phalanx 2: Tepe Yahya 3756-1 (Period IVC.2)
dimension **V**: greatest length
W: proximal breadth
range in diagram reflects range of dimensions in the standard for phalanges of digit III or IV, anterior and posterior.

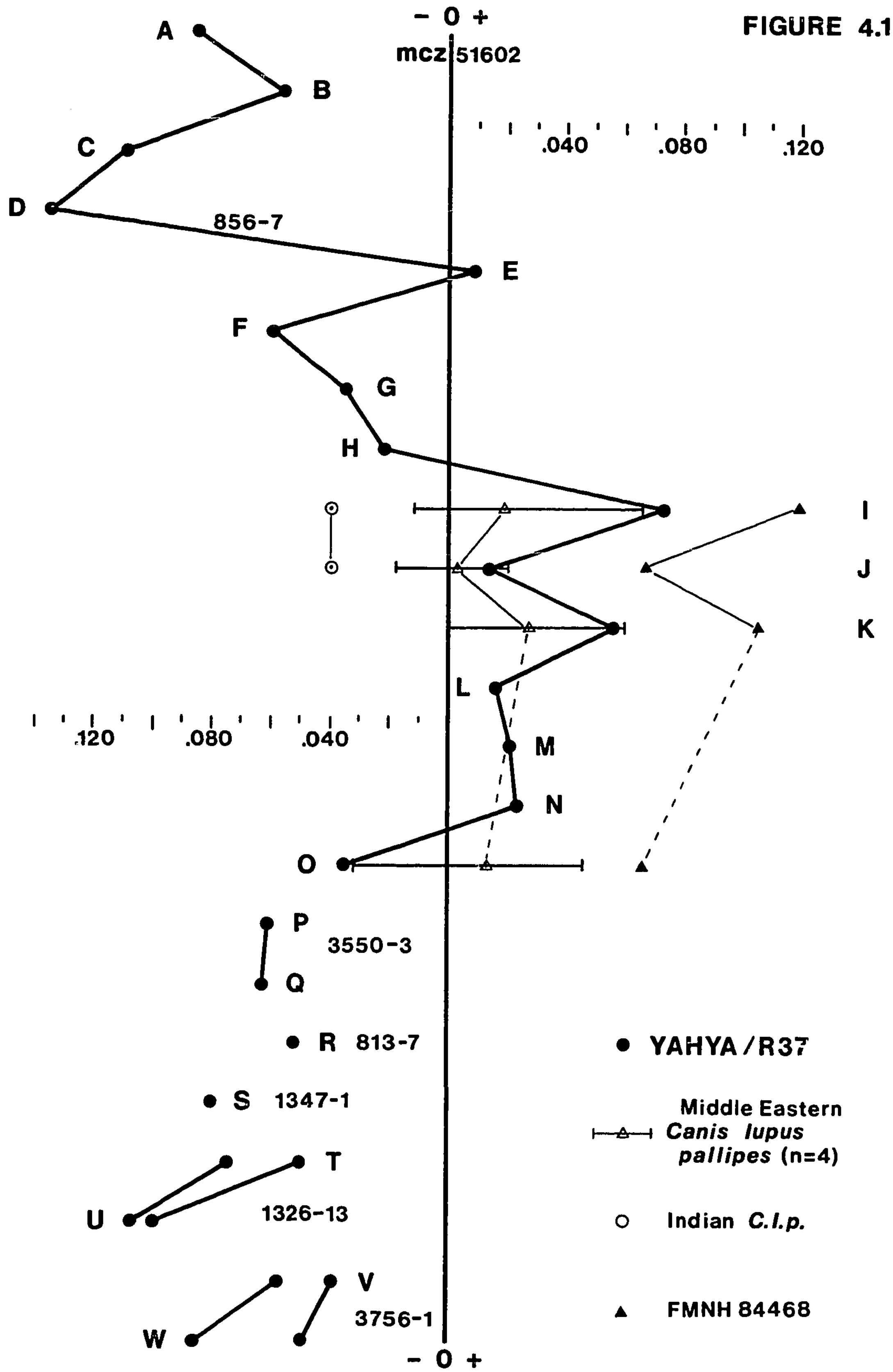


FIGURE 4.1
- 0 +
mcz 51602
.040
.080
.120
A
B
C
D
856-7
E
F
G
H
I
J
K
L
M
N
O
P
3550-3
Q
R 813-7
S 1347-1
T
U
1326-13
V
W
3756-1
YAHYA / R37
Middle Eastern Canis lupus pallipes (n=4)
Indian C.l.p.
FMNH 84468

FIGURE 4.2

Enamel patterns of Equus sp. cheekteeth from Tepe Yahya

Note: for dimensions, see Table 4.6 and 4.7.

Key:
A: P4/ or M1/ (773-6: Period VIA)
B: (?)M3/ (1372-6: Period VC)
C: P4/ or M1/ (1320-9: Period VA.1)
D: P/3 or P/4 (784-4: Period VIB.2)
E: P/4 (1930-29: Period VIB.2)
F: M/1 (1932-53: Period VIB.2)
G: D/2 (= dP/2) (1934-13: Period VIB.2-VIIA)
H: D/3 (= dP/3) (1934-12: Period VIB.2-VIIA).

FIGURE 4.2

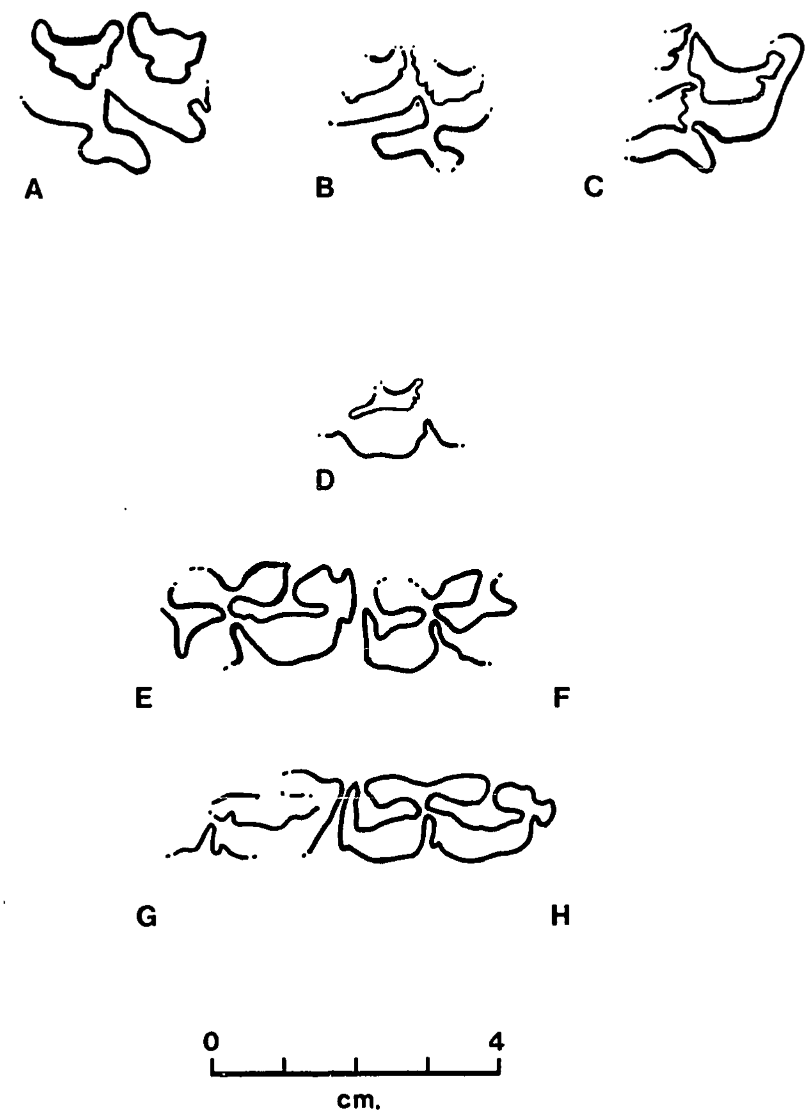


FIGURE 4.3

Diagram of not-corrected log differences for Sus scrofa bones from various sites

Note: data in Table 4.12;

Key: # = median, * = 1 value, 2 or 3 or 4, etc. = that number of values, + = greater than 9 values, (##) = total values for the site, 0 = zero-line or standard: see Table 4.11.

FIGURE 4.3

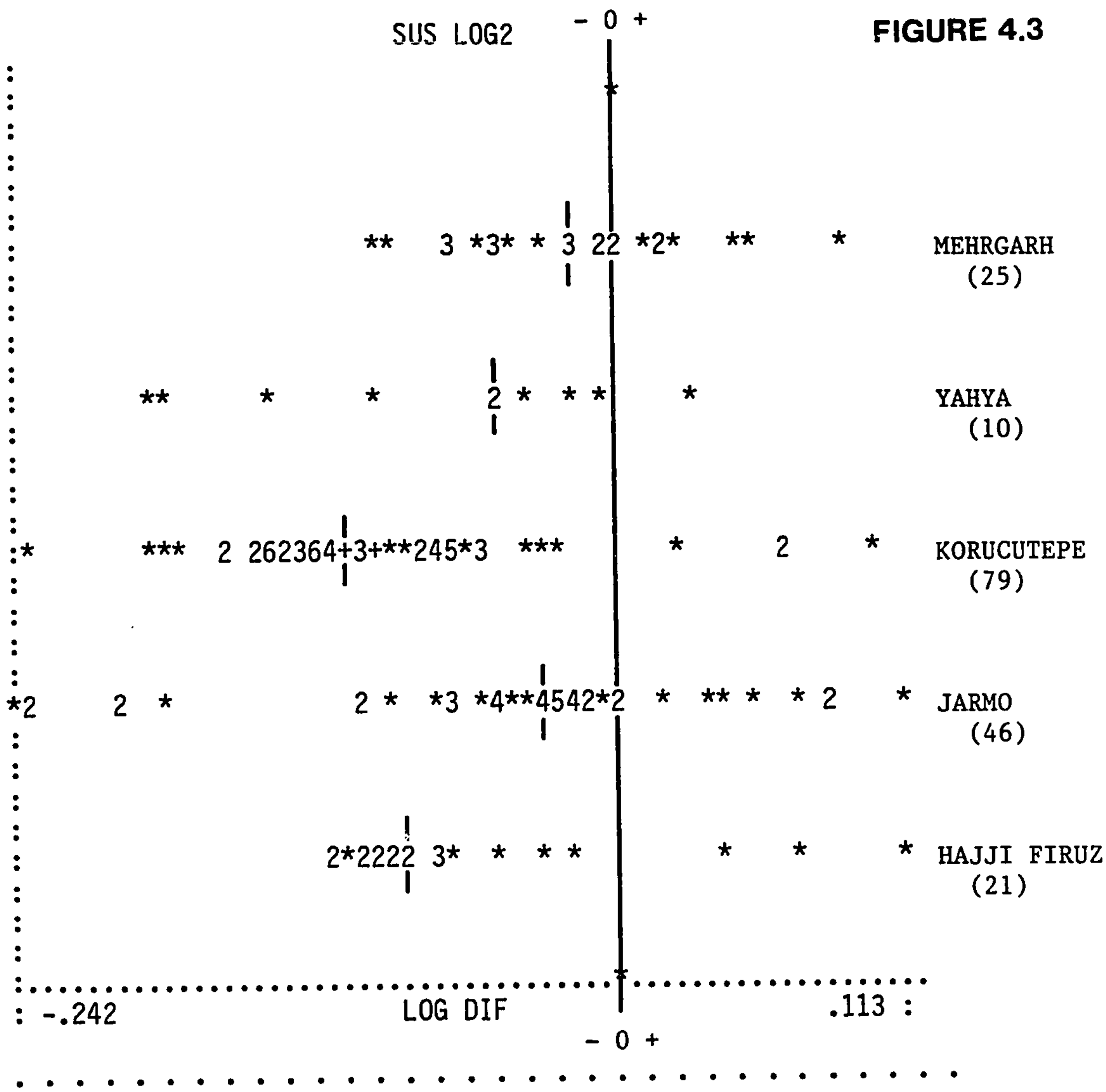

SUS LOG2
- 0 +
MEHRGARH
(25)
YAHYA
(10)
KORUCUTEPE
(79)
JARMO
(46)
HAJJI FIRUZ
(21)
-.242
LOG DIF
.113
- 0 +

FIGURE 4.4

Diagram of corrected log differences for *Sus scrofa* bones from various sites

Notes: data in Table 4.12; correction factors in Section 4.4.6.2.

Key: # = median, * = 1 value, 2 or 3 or 4, etc. = that number of values, + = greater than 9 values, (##) = total values for the site, 0 = zero-line or standard: see Table 4.11.

FIGURE 4.4

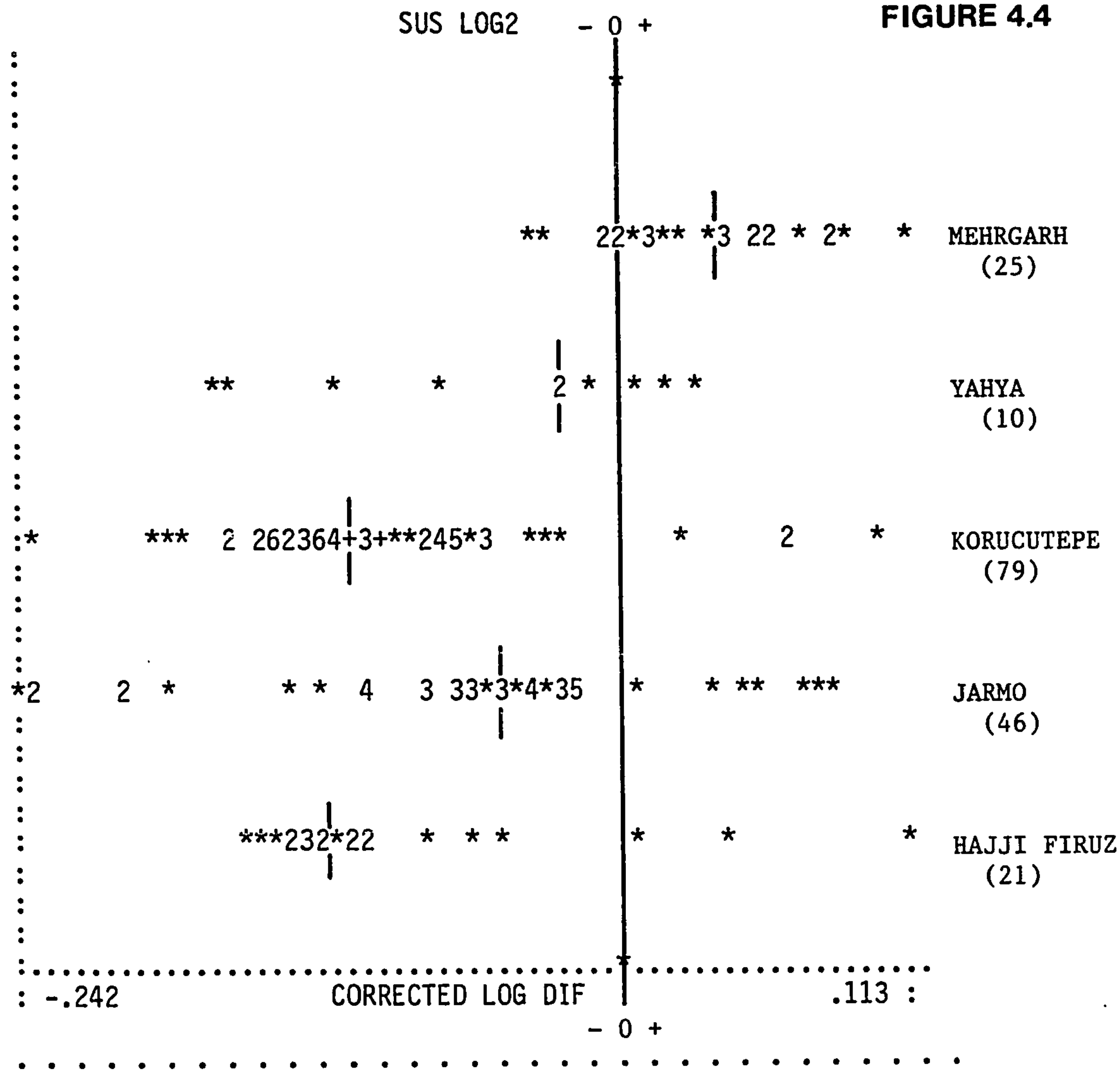

SUS LOG2
- 0 +
MEHRGARH (25)
YAHYA (10)
KORUCUTEPE (79)
JARMO (46)
HAJJI FIRUZ (21)
-.242
CORRECTED LOG DIF
.113
- 0 +

FIGURE 4.5

Diagram of corrected log differences for *Sus scrofa* bones from various sites, excluding third molars

Notes: data in Table 4.12; correction factors in Section 4.4.6.2.

Key: # = median, * = 1 value, 2 or 3 or 4, etc. = that number of values, + = greater than 9 values, (##) = total values for the site, 0 = zero-line or standard: see Table 4.11.

FIGURE 4.5

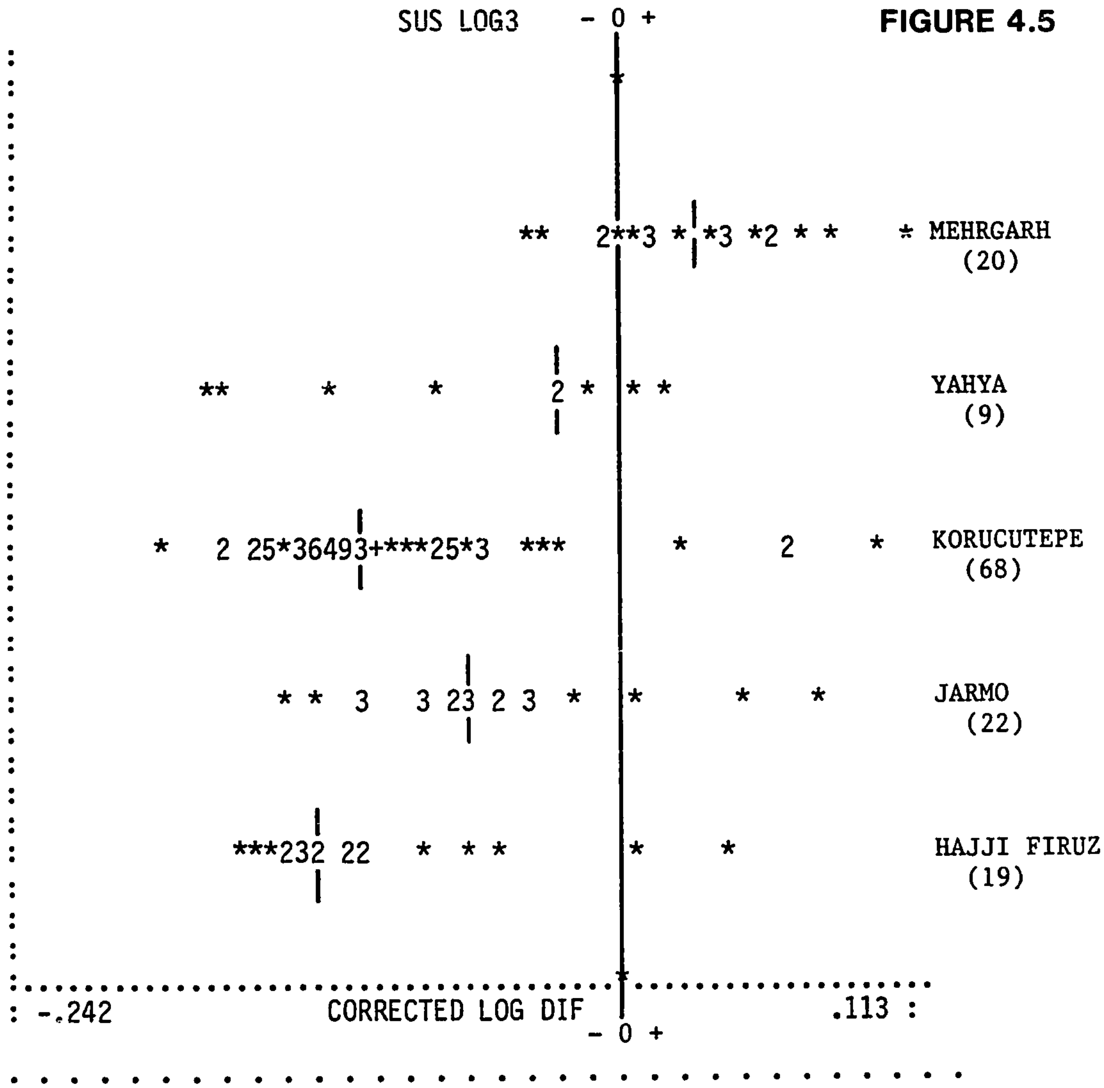

SUS LOG3
- 0 +
MEHRGARH (20)
YAHYA (9)
KORUCUTEPE (68)
JARMO (22)
HAJJI FIRUZ (19)
-.242
CORRECTED LOG DIF
.113
- 0 +

FIGURE 5.1

Figure 5.1-A: Characteristic Bos taurus and Bos indicus orbital rims (of the jugal or zygomatic bones)

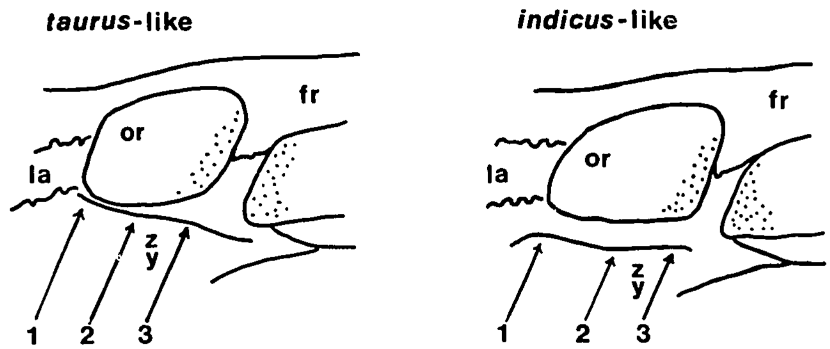
Notes: skull viewed from left side, oral (anterior) to left; drawings after Grigson (1976: figure 8); see Table 5.2

Key:
1 = nasal portion of orbital rim
2 = middle portion of orbital rim
3 = nuchal portion of orbital rim.
la = lacrimal bone
or = orbit
fr = frontal bone
zy = zygomatic (jugal) bone

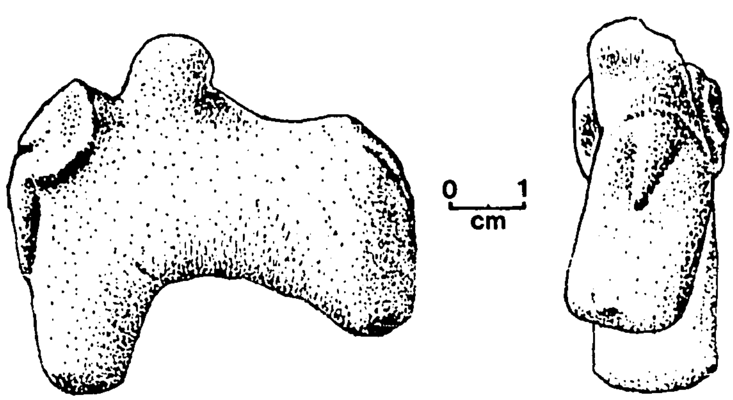
Figure 5.1-B: Figurine of thoracic-humped "bull" from Mehrgarh (Baluchistan, Pakistan)

Notes: provenience: Area MR.3/4, sector M1, unit 988; ceramic Neolithic Period IIA; courtesy of Mission archeologique francaise en Pakistan, J.-F. Jarrige, director.

FIGURE 5.1



A



B

FIGURE 5.2

Diagram of log differences for Bos sp. bones from Tepe Yahya and Tepe Gaz Tavila-R37 by skeletal part

Note: data and measurement definitions in Tables 5.3 and 5.4;

Key: # = median, * = 1 value, 2 or 3 or 4, etc. = that number of values, (##) = total values for that skeletal part;

0 = zero-line or standard: see Table 5.3;

A = approximate location of median for Yahya IVC (= -.061: see Figure 5.3; median for C-II+III = -.059, for Humerus = -.060),

B = approximate location of median for Yahya VIIB (= -.046: see Figure 5.3; median for Tibia = -.0475, for Femur = -.048),

C = approximate location of median for Yahya VB (= -.027: see Figure 5.3).

FIGURE 5.2

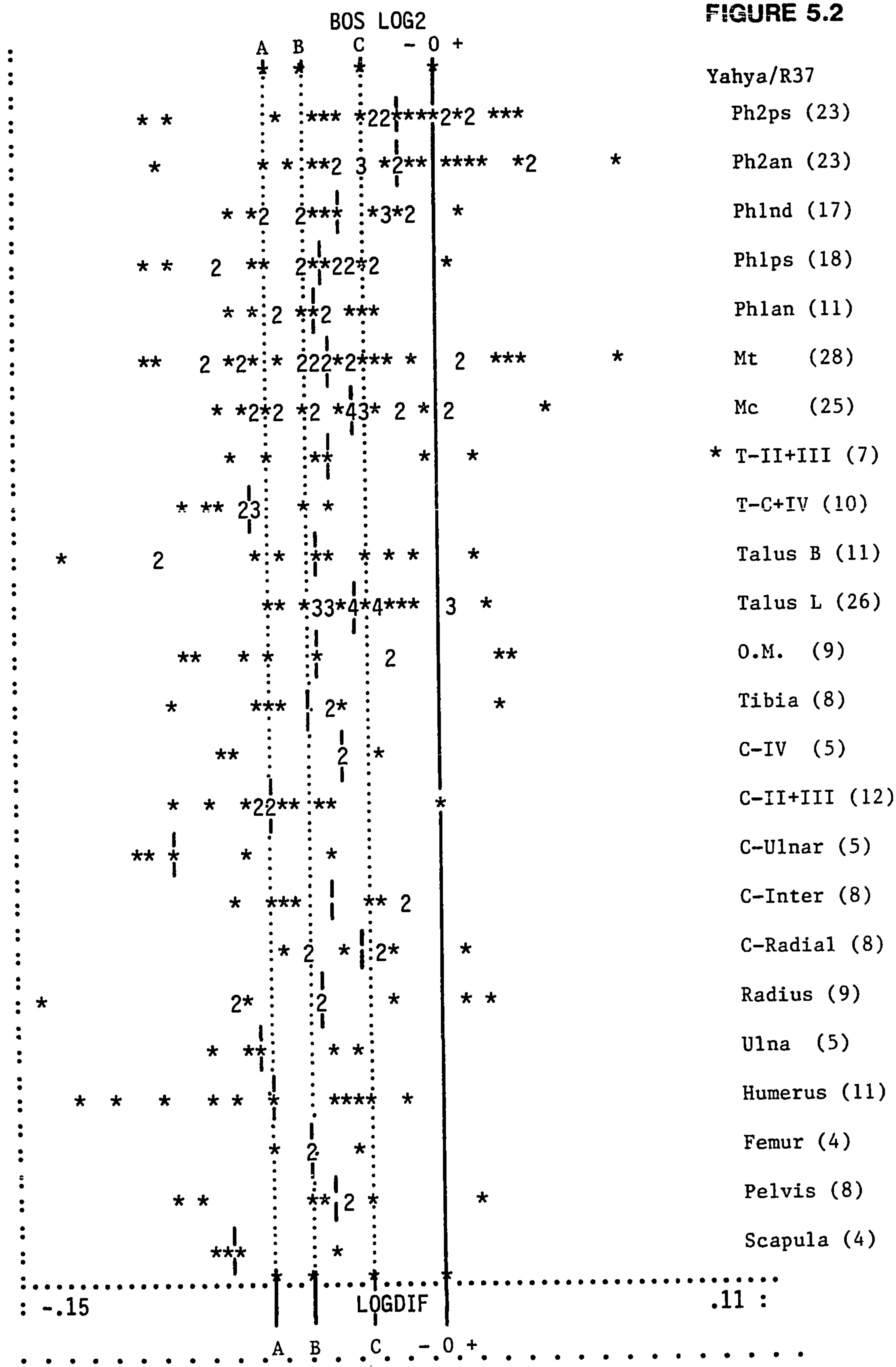

BOS LOG2
A
B
C
- 0 +
Yahya/R37
Ph2ps (23)
Ph2an (23)
Ph1nd (17)
Ph1ps (18)
Ph1an (11)
Mt (28)
Mc (25)
T-II+III (7)
T-C+IV (10)
Talus B (11)
Talus L (26)
O.M. (9)
Tibia (8)
C-IV (5)
C-II+III (12)
C-Ulnar (5)
C-Inter (8)
C-Radial (8)
Radius (9)
Ulna (5)
Humerus (11)
Femur (4)
Pelvis (8)
Scapula (4)
-.15
LOGDIF
.11

FIGURE 5.3

Diagram of log differences for *Bos* sp. bones from Tepe Yahya and Tepe Gaz Tavila-R37 by temporal unit

Note: data and measurement definitions in Tables 5.3 and 5.4;

Key: # = median, * = 1 value, 2 or 3 or 4, etc. = that number of values, (##) = total values for that temporal unit;
0 = zero-line or standard: see Table 5.3;
A = approximate location of median for Yahya IVC (plotted on Figure 5.2)
B = approximate location of median for Yahya VIIB (plotted on Figure 5.2)
C = approximate location of median for Yahya VB (plotted on Figure 5.2);
medians: R37 = -.032, VIIE-C = -.043 (VIIC alone = -.047), VIIB = -.046, VIIB/A+VIIA = -.032, VII-VI = -.039, VIB = -.028, VIA = -.034, VC = -.040, VB = -.027, VA = -.036, IVC = -.061.

FIGURE 5.3

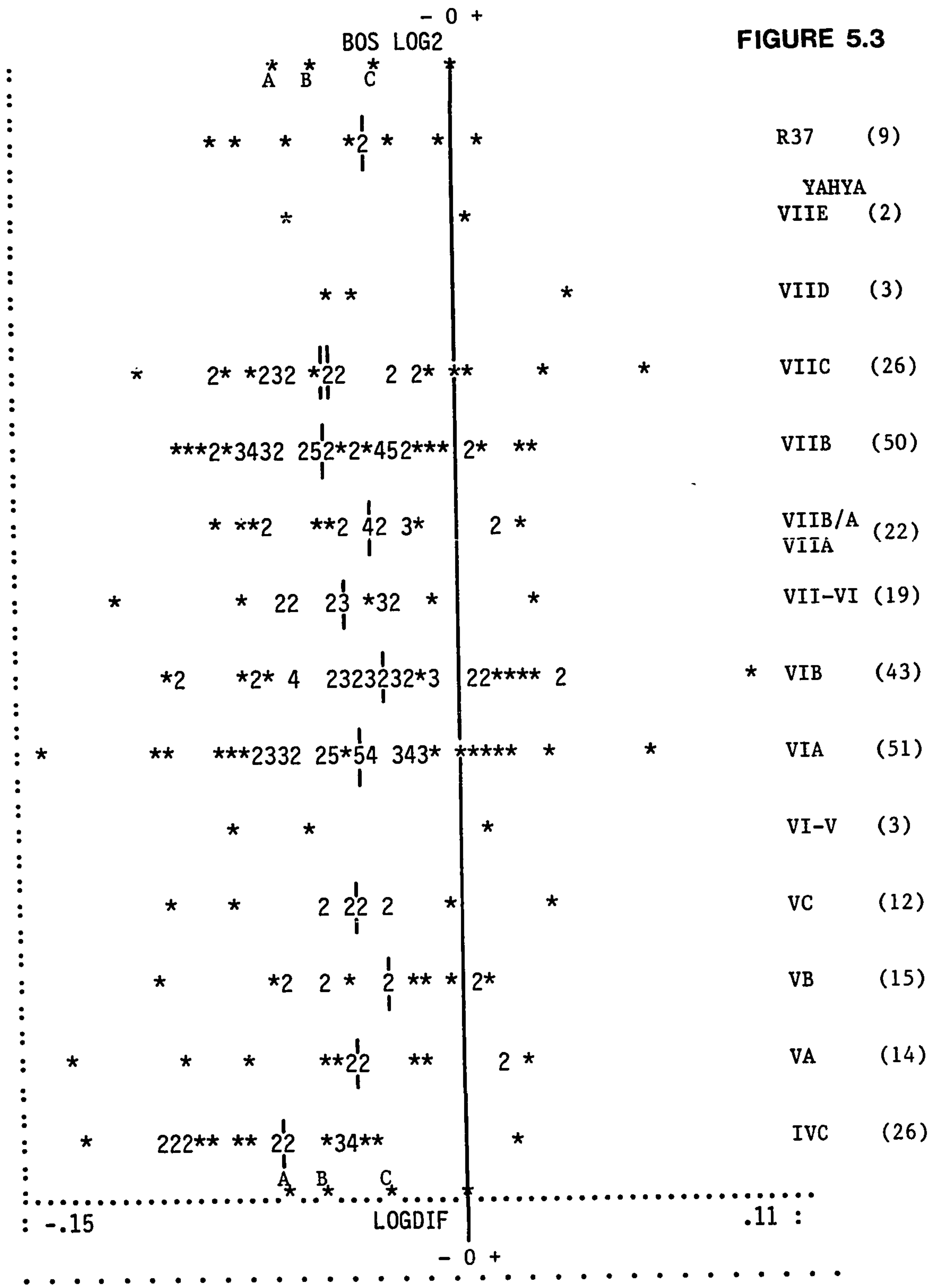

- 0 +
BOS LOG2
A B C
R37 (9)
YAHYA
VIIE (2)
VIID (3)
VIIC (26)
VIIB (50)
VIIB/A
VIIA (22)
VII-VI (19)
VIB (43)
VIA (51)
VI-V (3)
VC (12)
VB (15)
VA (14)
IVC (26)
A B C
-.15
LOGDIF
.11
- 0 +

FIGURE 5.4

Diagram of log differences for Bos sp. bones from Jarmo and from Tepe Yahya and Tepe Gaz Tavila-R37 displayed as proportions within temporal units

Notes: area under curve = 100 percent of log differences for that unit; see Figure 5.3 and Table 5.4; for standard see Table 5.3; for Jarmo bone dimensions see Stampfli (1983: tables 28 and 32);

Key: arrows = median values; 0 = standard; for Yahya IVC, ... = curve for IVC.1 (n = 10), ----- = curve for IVC.2 (n = 16).

FIGURE 5.4

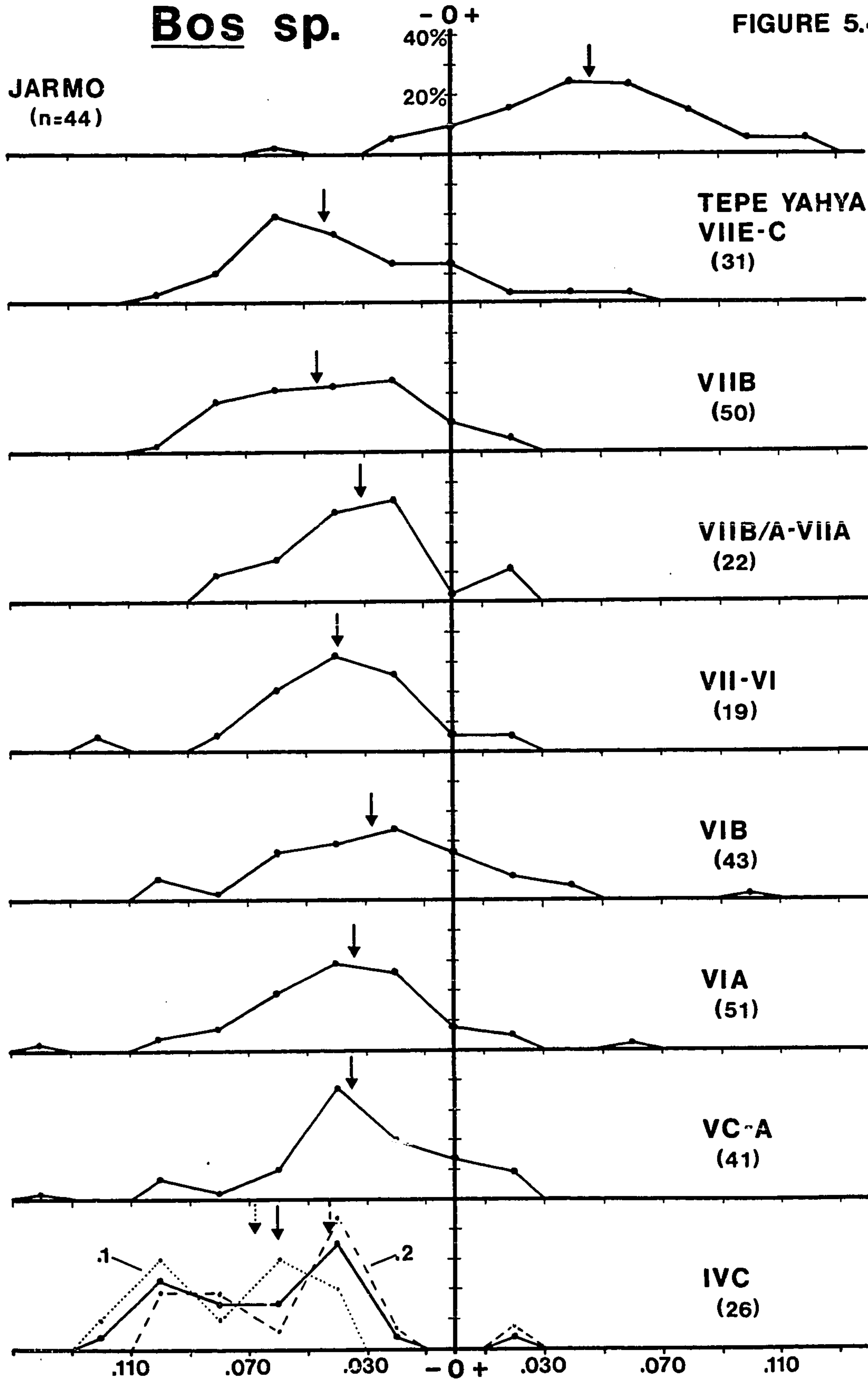

Bos sp.
- 0 +
40%
20%
JARMO
(n=44)
TEPE YAHYA
VIIE-C
(31)
VIIB
(50)
VIIB/A-VIIA
(22)
VII-VI
(19)
VIB
(43)
VIA
(51)
VC-A
(41)
.1
.2
IVC
(26)
.110
.070
.030
- 0 +
.030
.070
.110

FIGURE 5.5

Diagram of log differences for extreme and average dimensions of *Bos* sp. bones from Shahr-i Sokhta

Notes: for standard and measurement definitions see Table 5.3; data from Table 5.5.

Key:
* = value from Table 5.5; central * = average (mean);
!
--- = Yahya/R37 medians for that same skeletal part
! (see Figure 5.2);
(##) = sample size as reported by Caloi and Compagnoni (1981: table 3).

FIGURE 5.5

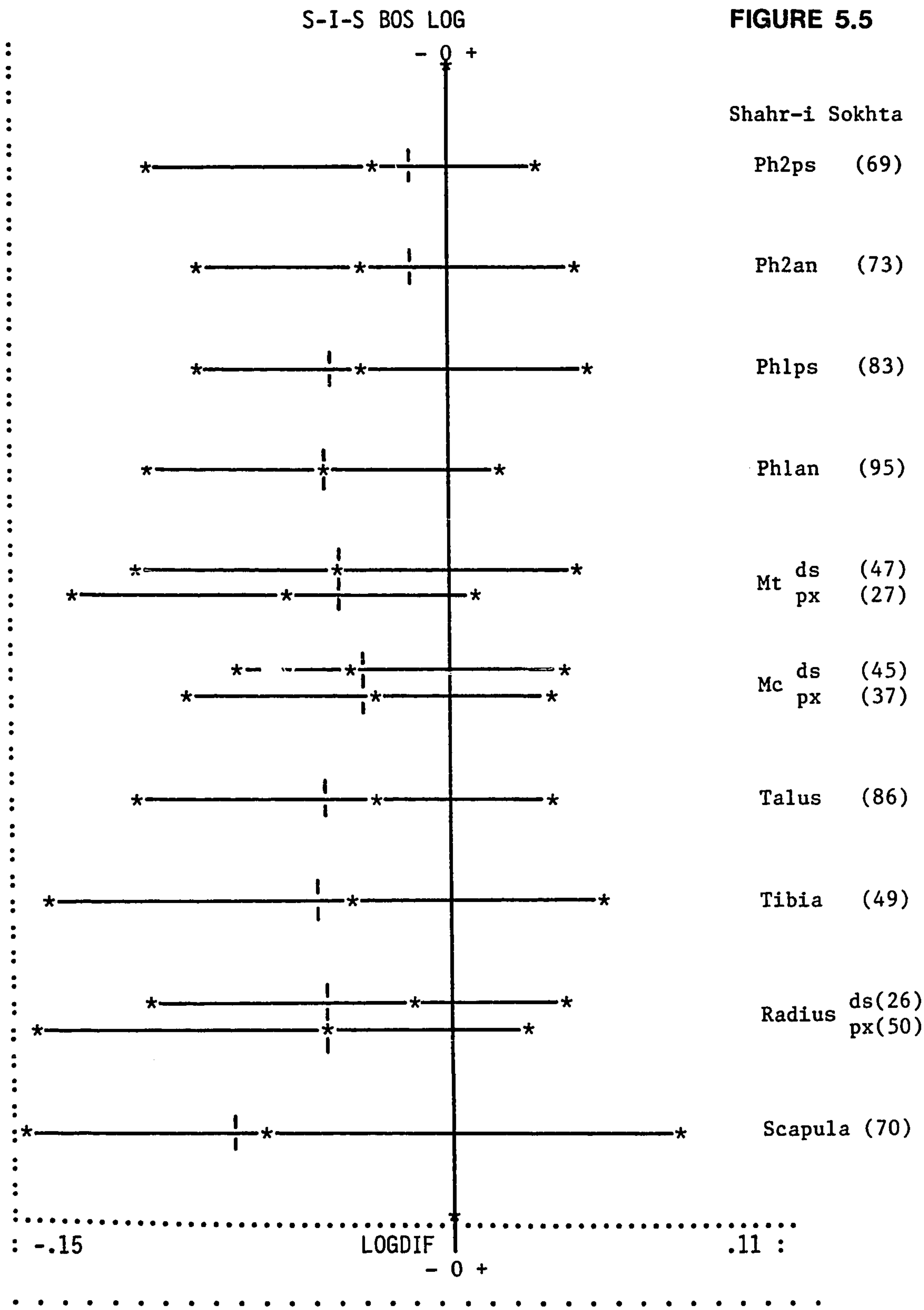

S-I-S BOS LOG
- 0 +
Shahr-i Sokhta
Ph2ps (69)
Ph2an (73)
Ph1ps (83)
Ph1an (95)
Mt ds (47)
px (27)
Mc ds (45)
px (37)
Talus (86)
Tibia (49)
Radius ds(26)
px(50)
Scapula (70)
-.15
LOGDIF
.11
- 0 +

FIGURE 5.6

Scatter plot of circumferance by greatest diameter for Gazella sp. horncore dimensions from various sites

Notes: data in Table 5.9; specimens plotted in upper right are from males, those in lower left from females.

Key: * = 1 specimen; 2, 3, etc. = that number of specimens;
---- = Jarmo (data from Stampfli 1983: table 28)
____ = Sarab (data from Bokonyi 1977: 65)
.... = Mehrgarh (data from Meadow, unpublished)
circle around * or # = specimen from Tepe Yahya (see Table 5.8)

:--- = median for greatest diameter at base of male horncores from Jarmo (J), Sarab (S), Mehrgarh (M), and Tepe Yahya (Y)
..!.. = median for circumferance at base of male horncores from Jarmo (J), Sarab (S), Mehrgarh (M), and Tepe Yahya (Y).

FIGURE 5.6

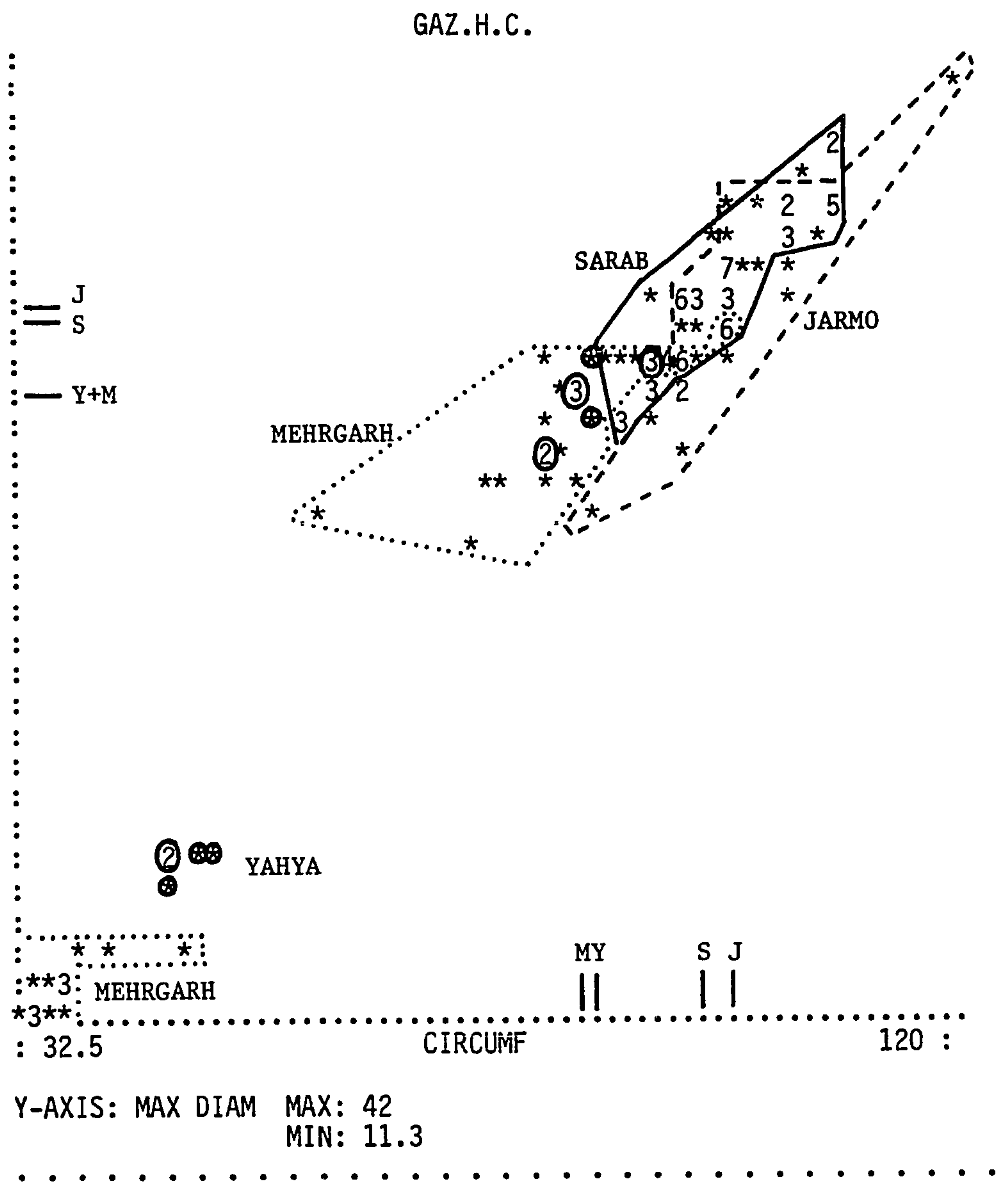

GAZ.H.C.
J
S
Y+M
SARAB
JARMO
MEHRGARH
YAHYA
MEHRGARH
MY
S J
: 32.5
CIRCUMF
120 :
Y-AXIS: MAX DIAM MAX: 42
MIN: 11.3

FIGURE 5.7

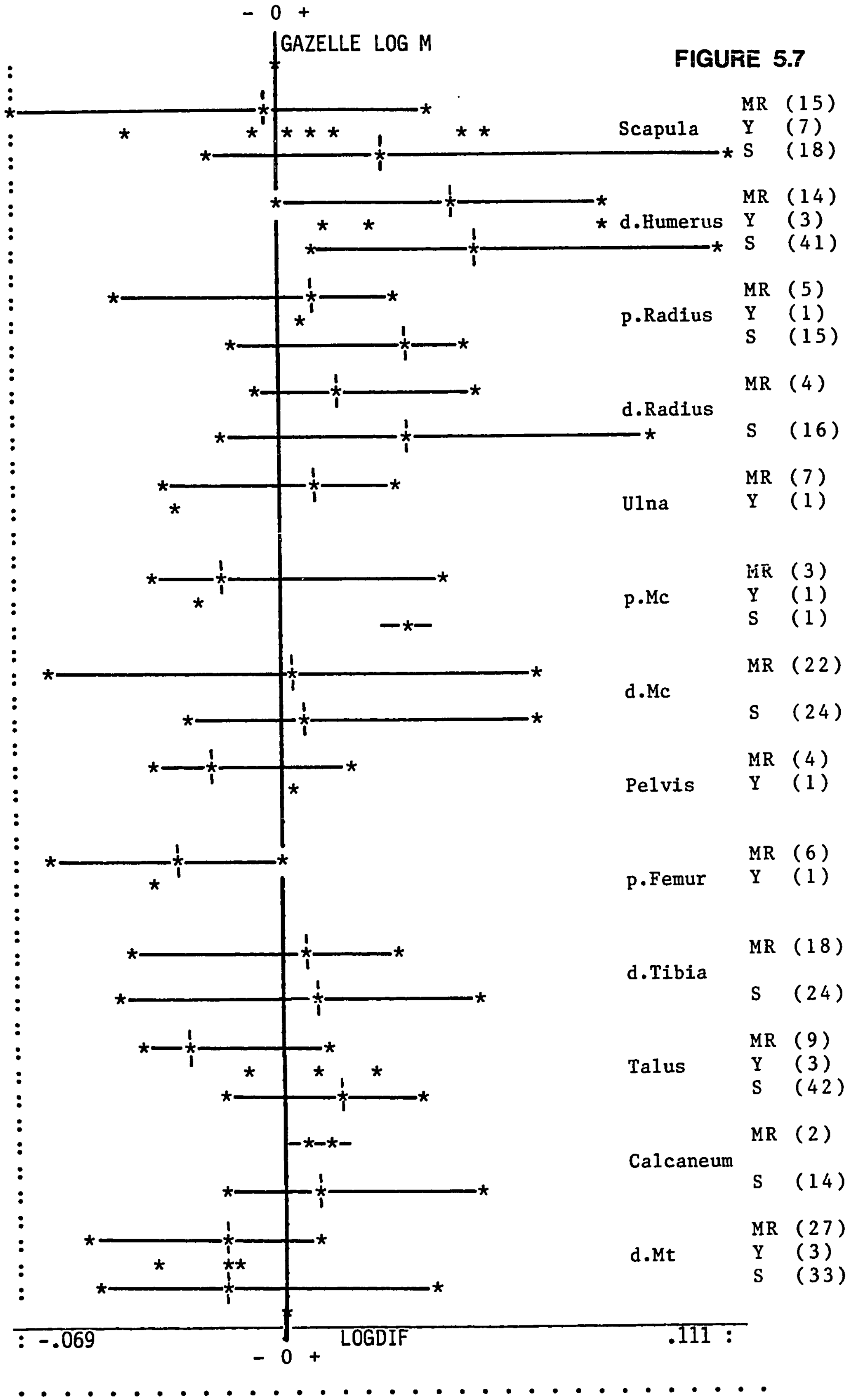
Diagram of log differences by skeletal part for extreme and avarage dimensions of Gazella sp. bones from various sites and for selected Gazella sp. bones from Tepe Yahya and Tepe Gaz Tavila/R37

Notes: for standard and measurement definitions see Table 5.11; data in Table 5.12.

Key:
MR = Mehrgarh (Meadow, unpublished data)
Y = Yahya and R37 (here, Table 5.10)
S = Sarab (Bokonyi 1977: 66-73)

* = median values for Mehrgarh and Sarab

* = extreme or individual values
(##) = number of specimens or log difference values.



- 0 +
GAZELLE LOG M
FIGURE 5.7
Scapula
MR (15)
Y (7)
S (18)
d.Humerus
MR (14)
Y (3)
S (41)
p.Radius
MR (5)
Y (1)
S (15)
d.Radius
MR (4)
S (16)
Ulna
MR (7)
Y (1)
p.Mc
MR (3)
Y (1)
S (1)
d.Mc
MR (22)
S (24)
Pelvis
MR (4)
Y (1)
p.Femur
MR (6)
Y (1)
d.Tibia
MR (18)
S (24)
Talus
MR (9)
Y (3)
S (42)
Calcaneum
MR (2)
S (14)
d.Mt
MR (27)
Y (3)
S (33)
-.069
LOGDIF
.111
- 0 +

FIGURE 5.8

Diagram of log differences by site for extreme and average dimensions of _Gazella_ sp. bones from various sites and for selected _Gazella_ sp. bones from Tepe Yahya and Tepe Gaz Tavila/R37

Notes: for standard and measurement definitions see Table 5.11; data in Table 5.12.

Key: * = range of medians for Mehrgarh and Sarab (see Figure 5.7); median for Tepe Yahya/R37
* = 1 value; 2, 3, 4 = that number of values.

FIGURE 5.8

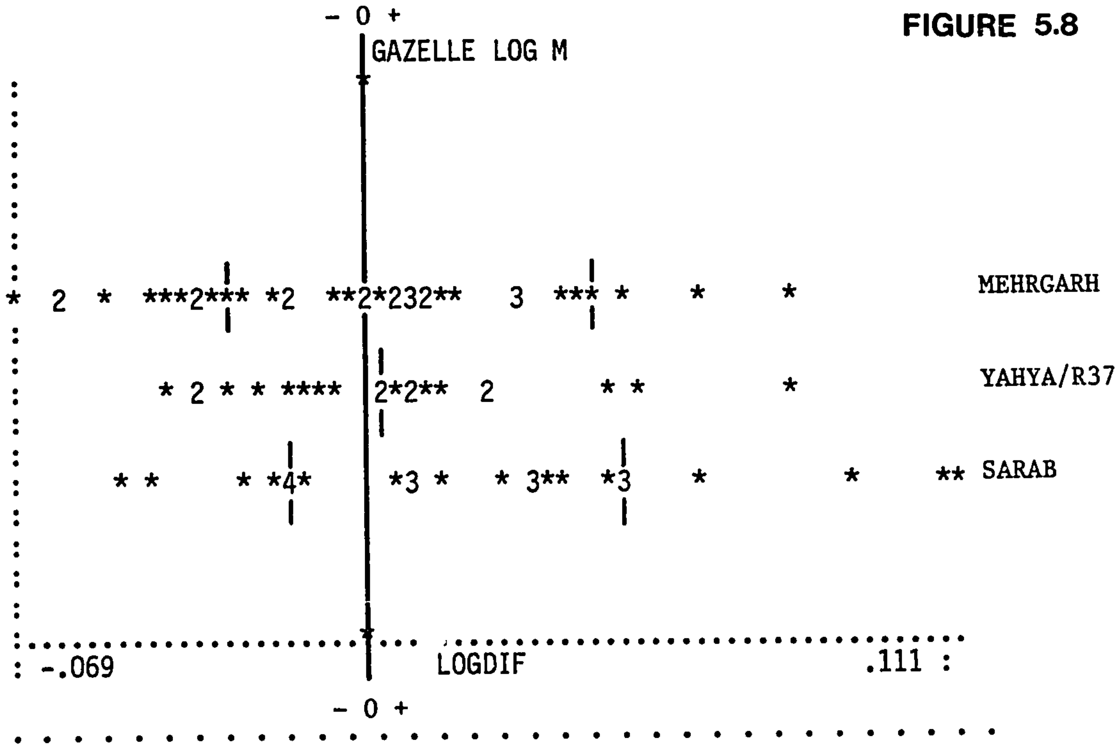


FIGURE 5.9

Proportion of caprine bones identified as _Capra_ or _Ovis_, representation of _Ovis_, and distribution of caprine skeletal parts for Tepe Yahya and Tepe Gaz Tavila-R37 taken together

Note: data in Tables 5.14 - 5.16 and summarized in Table 5.17.

Key: (for formulae below:
- Ov = identified as _Ovis_ (sheep)
- Cap = identified as _Capra_ (goat)
- O/C = _Ovis/Capra_ (sheep/goat): identified as sheep or goat but not as one or the other;
- # = number of examples of a particular skeletal part);

%O+C = (#Ov + #Cap) x 100 / (#Ov + #Cap + #O/C)
%Ov = #Ov x 100 / (#Ov + #Cap); note: %Cap = 100 - %Ov
A = %O+C for all skeletal parts plotted (= 1276/2359 = 54%)
B = %Ov for all skeletal parts plotted (= 374/2359 = 29%)
Dac = actual distribution of skeletal parts (for each skeletal part = #/2359)
Dex = expected distribution of skeletal parts (for each skeletal part except occipital and phalanges = 2/63; for occipital = 1/63, for phalanges = 8/63).

FIGURE 5.9

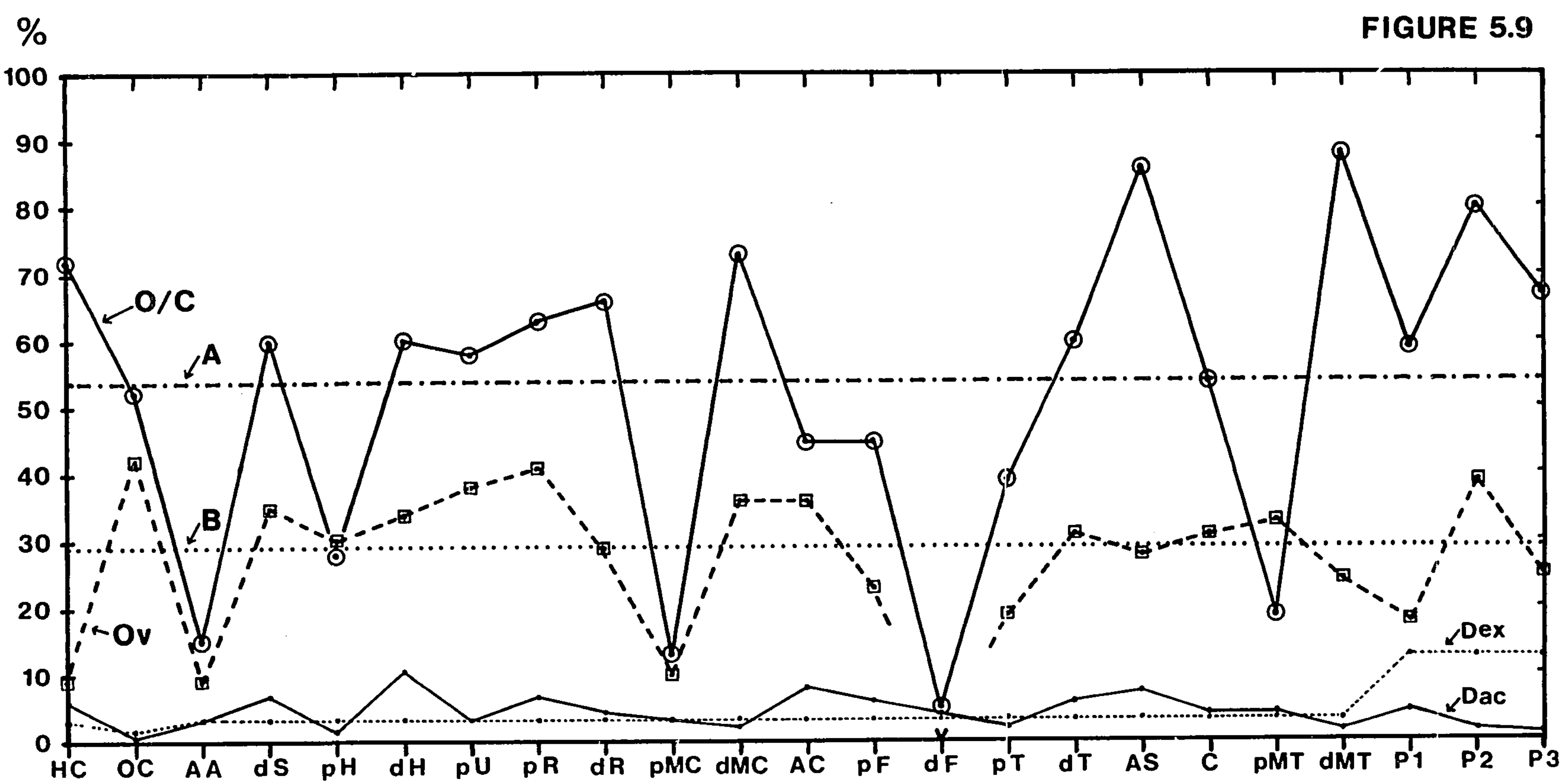

%
100
90
80
70
60
50
40
30
20
10
0
O/C
A
B
Ov
Dex
Dac
HC
OC
AA
dS
pH
dH
pU
pR
dR
pMC
dMC
AC
pF
dF
pT
dT
AS
C
pMT
dMT
P1
P2
P3

FIGURE 5.10

Diagram of log differences for _Capra_ sp. bones from Tepe Yahya and Tepe Gaz Tavila-R37 by skeletal part

Note: data and measurement definitions in Tables 5.20 and 5.21; a humerus value of -.156 is not included on this diagram.

Key: # = median, * = 1 value, 2 or 3 or 4, etc. = that number of values, + = greater than 9 values, (##) = total values for that skeletal part;
0 = zero-line or standard: see Table 5.20;
A = approximate location of median for R37 (= -.093: see Figure 5.11; median for Calcaneum = -.092, for Metatarsal = -.096),
B = approximate location of median for Yahya VIA/VI (= -.070: see Figure 5.11; median for Tibia = -.068).

FIGURE 5.10

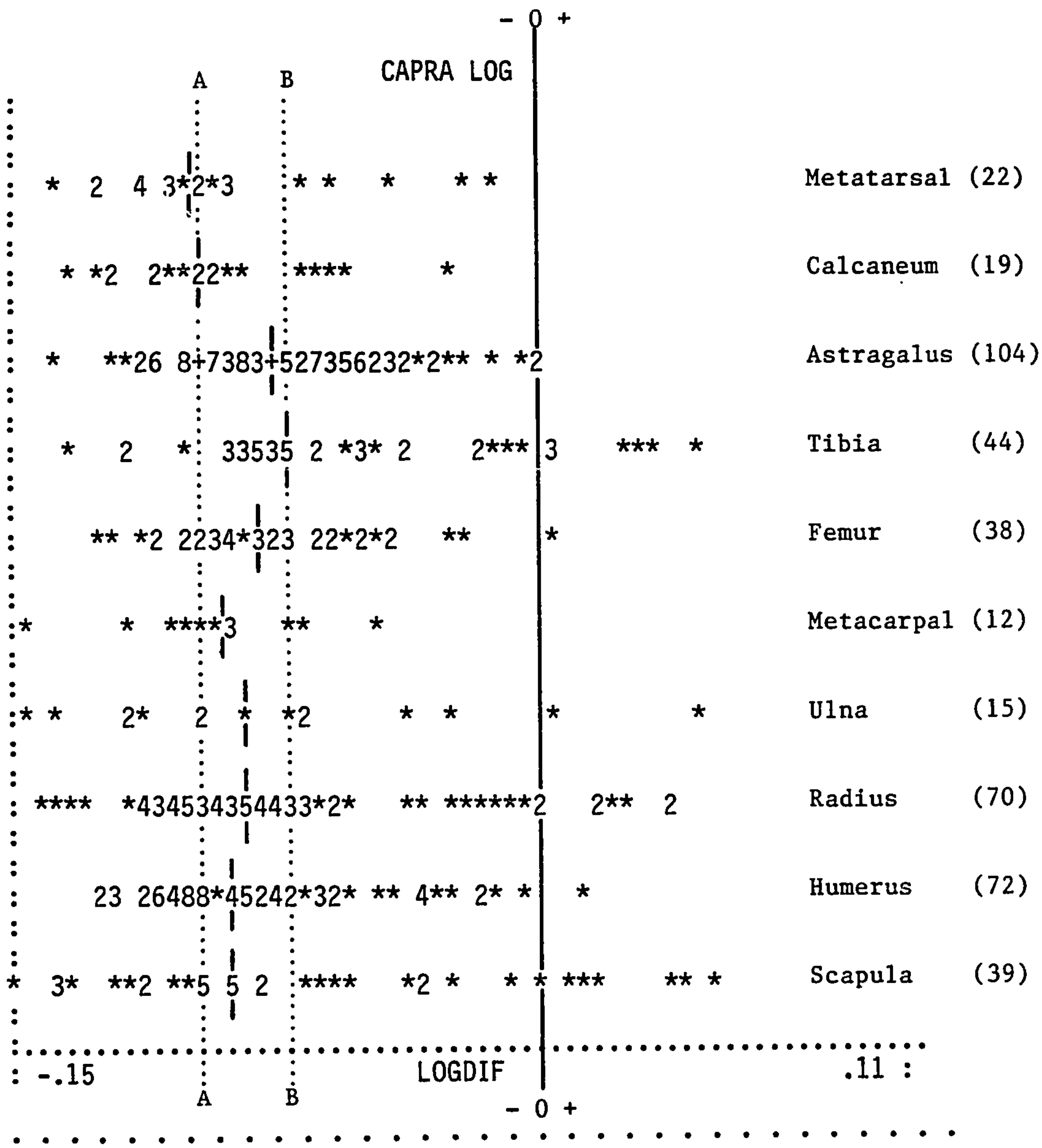

CAPRA LOG
- 0 +
A
B
Metatarsal (22)
Calcaneum (19)
Astragalus (104)
Tibia (44)
Femur (38)
Metacarpal (12)
Ulna (15)
Radius (70)
Humerus (72)
Scapula (39)
-.15
LOGDIF
.11

FIGURE 5.11

Diagram of log differences for <u>Capra</u> sp. bones from Tepe Yahya and Tepe Gaz Tavila-R37 by temporal unit

Note: data and measurement definitions in Tables 5.20 and 5.21; a Yahya VIIB value of -.156 is not included on this diagram.

Key: # = median, * = 1 value, 2 or 3 or 4, etc. = that number of values, (##) = total values for that temporal unit;
0 = zero-line or standard: see Table 5.20;
A = approximate location of median for R37 (plotted on Figure 5.10)
B = approximate location of median for Yahya VIA/VI (plotted on Figure 5.10)
medians: R37 = -.093, VIIE-C = -.085, VIIB = -.084, VIIB/A+VIIA = -.076, VIB = -.085, VIA/VI = -.070, VC-VB = -.080, VA = -.076, IVC.2 = -.080, IVC.1 = -.081.

FIGURE 5.11

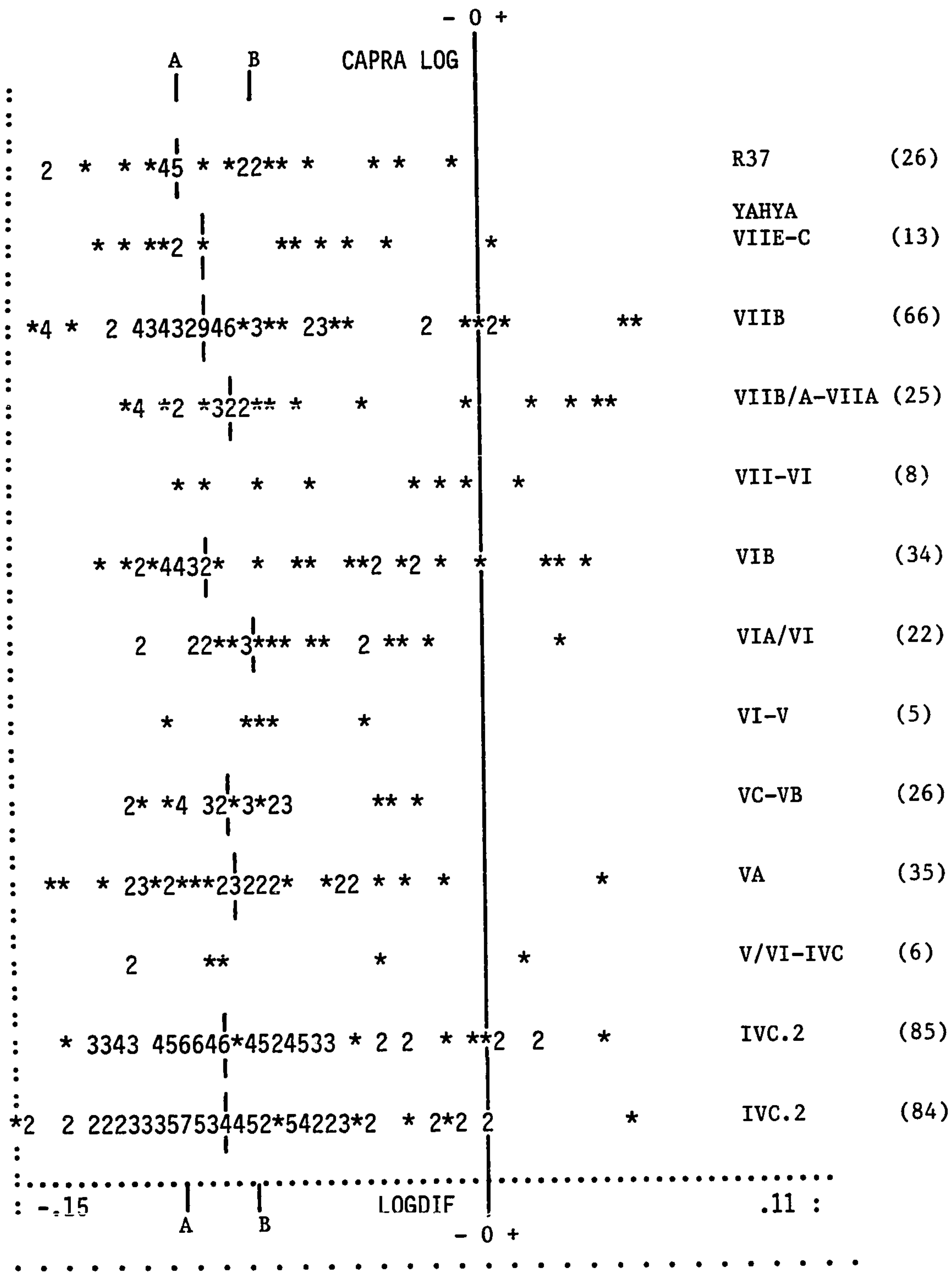

CAPRA LOG
LOGDIF
A
B
- 0 +
-.15
.11
R37 (26)
YAHYA VIIE-C (13)
VIIB (66)
VIIB/A-VIIA (25)
VII-VI (8)
VIB (34)
VIA/VI (22)
VI-V (5)
VC-VB (26)
VA (35)
V/VI-IVC (6)
IVC.2 (85)
IVC.2 (84)

FIGURE 5.12

Diagram of log differences for Capra sp. bones from Tepe Yahya Tepe Gaz Tavila-R37 displayed as proportions within temporal units

Notes: area under curve = 100 percent of log differences for that unit; see Figure 5.11 and Table 5.21; for standard see Table 5.20;

Key: arrows = median values; 0 = standard.

FIGURE 5.12

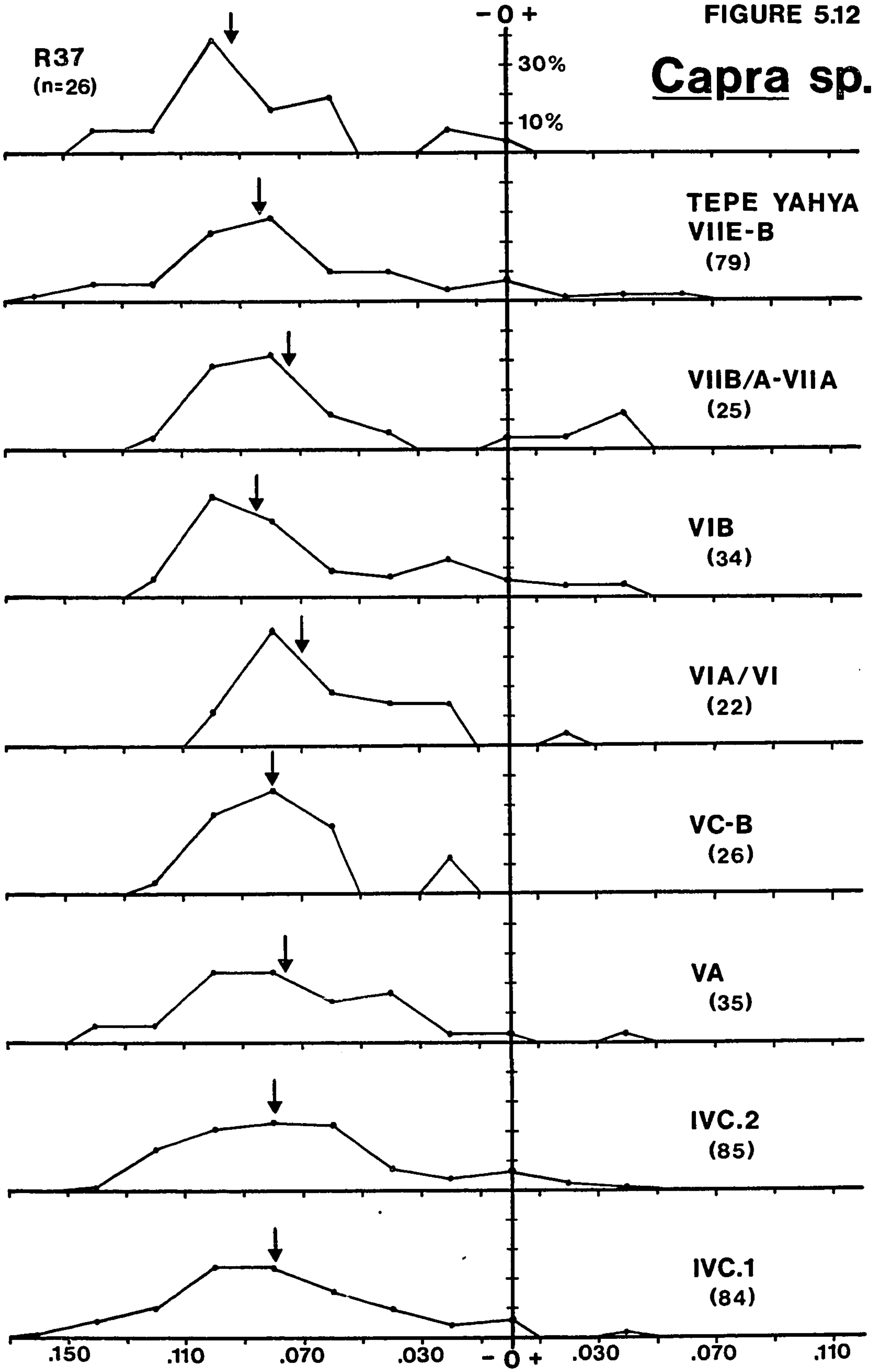

- 0 +
R37
(n=26)
30%
10%
Capra sp.
TEPE YAHYA
VIIE-B
(79)
VIIB/A-VIIA
(25)
VIB
(34)
VIA/VI
(22)
VC-B
(26)
VA
(35)
IVC.2
(85)
IVC.1
(84)
.150
.110
.070
.030
- 0 +
.030
.070
.110

FIGURE 5.13

Diagram of log differences for *Ovis* sp. bones from Tepe Yahya and Tepe Gaz Tavila-R37 by skeletal part

Note: data and measurement definitions in Tables 5.20 and 5.22; a radius value of -.163 is not included on this diagram.

Key: # = median, * = 1 value, 2 or 3 or 4, etc. = that number of values, (##) = total values for that skeletal part;
0 = zero-line or standard: see Table 5.20;
A = approximate location of median for Yahya V (= -.055: see Figure 5.14; median for Ulna = -.054, for Femur = -.0545),
B = approximate location of median for Yahya VI (= -.026: see Figure 5.14).

FIGURE 5.13

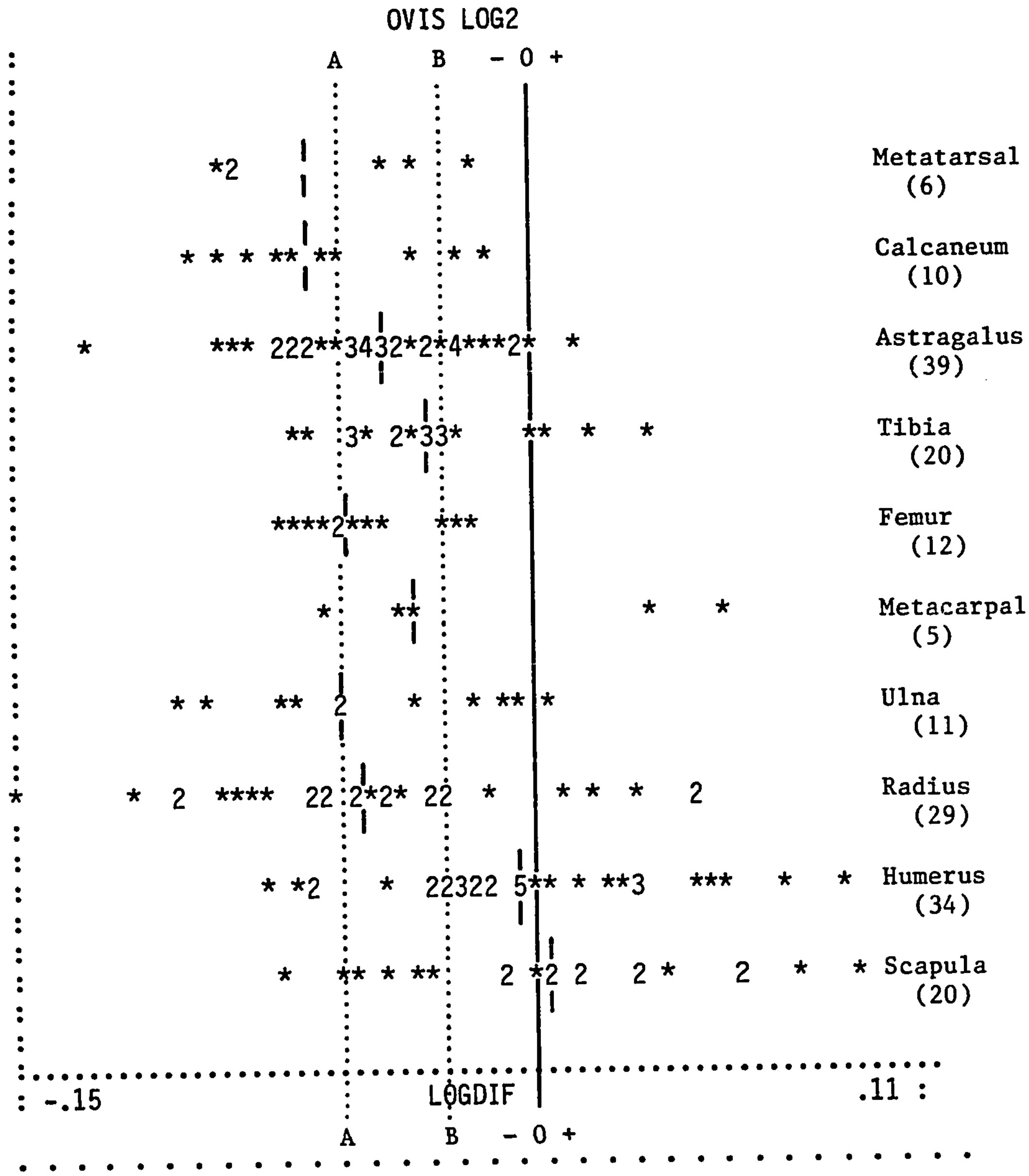

OVIS LOG2
A
B
- 0 +
Metatarsal (6)
Calcaneum (10)
Astragalus (39)
Tibia (20)
Femur (12)
Metacarpal (5)
Ulna (11)
Radius (29)
Humerus (34)
Scapula (20)
-.15
LOGDIF
.11

FIGURE 5.14

Diagram of log differences for *Ovis* sp. bones from Tepe Yahya and Tepe Gaz Tavila-R37 by temporal unit

Note: data and measurement definitions in Tables 5.20 and 5.22; a Yahya IVC.2 value of -.163 is not included on this diagram.

Key: # = median, * = 1 value, 2 or 3 or 4, etc. = that number of values, (##) = total values for that temporal unit;
0 = zero-line or standard: see Table 5.20;
A = approximate location of median for Yahya V (plotted on Figure 5.13)
B = approximate location of median for Yahya VI (plotted on Figure 5.13)
medians: R37 = +.002, VII = -.034, VII-VI = -.007, VI = -.026, V = -.055, V-IVC = -.060, IVC.2 = -.040, IVC.1 = -.043.

FIGURE 5.14

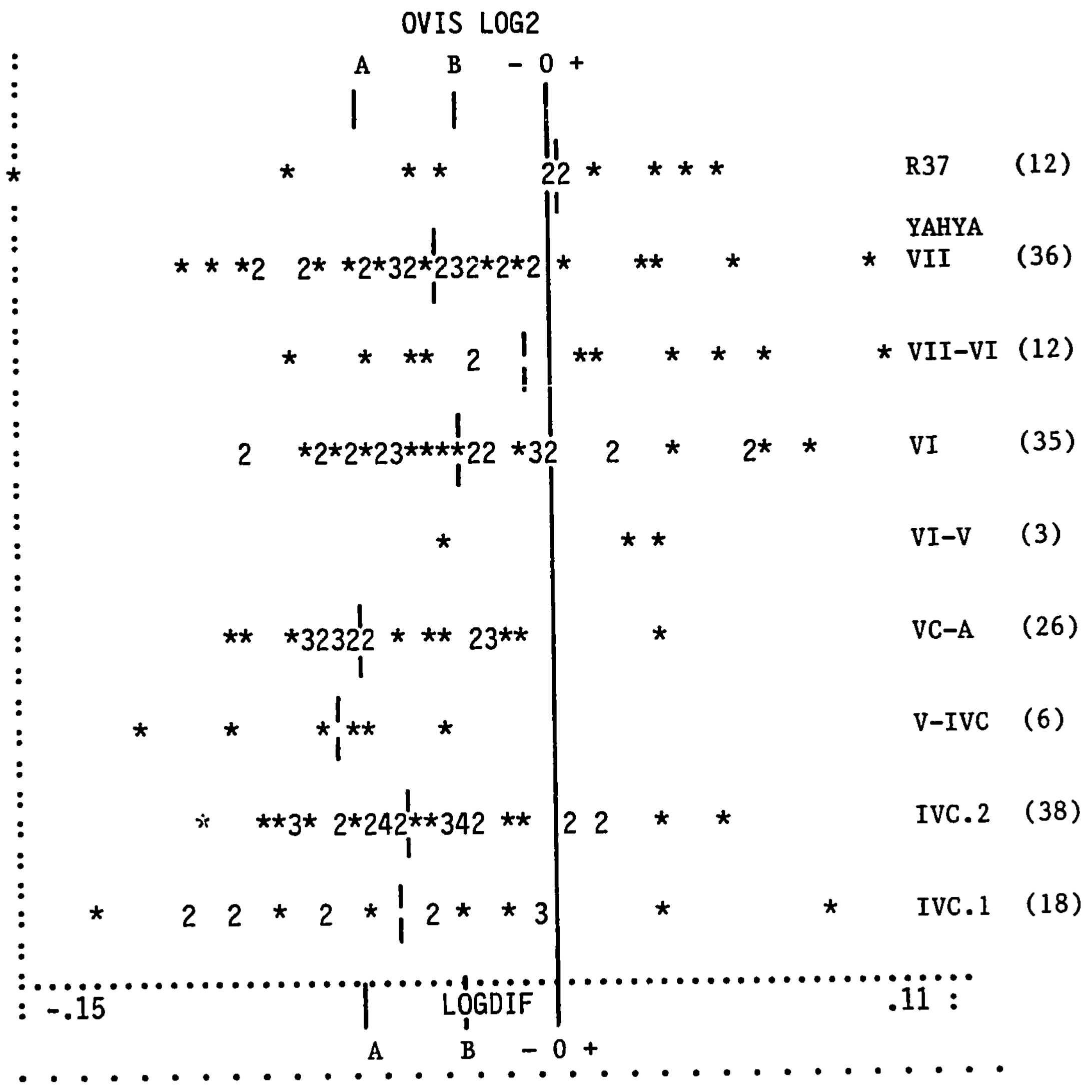

OVIS LOG2
A
B
- 0 +
R37 (12)
YAHYA
VII (36)
VII-VI (12)
VI (35)
VI-V (3)
VC-A (26)
V-IVC (6)
IVC.2 (38)
IVC.1 (18)
-.15
LOGDIF
.11
A
B
- 0 +

FIGURE 5.15

Diagram of log differences for _Ovis_ sp. bones from Tepe Yahya and Tepe Gaz Tavila-R37 by temporal unit: scapula and humerus removed

Note: data and measurement definitions in Tables 5.20 and 5.22; a Yahya IVC.2 value of -.163 is not included on this diagram.

Key: # = median, * = 1 value, 2 or 3 or 4, etc. = that number of values, (##) = total values for that temporal unit;
0 = zero-line or standard: see Table 5.20;
medians: R37 = -.034, VII = -.043, VII-VI = -.023, VI = -.034, V = -.0565, V-IVC = -.060, IVC.2 = -.048, IVC.1 = -.071.

FIGURE 5.15

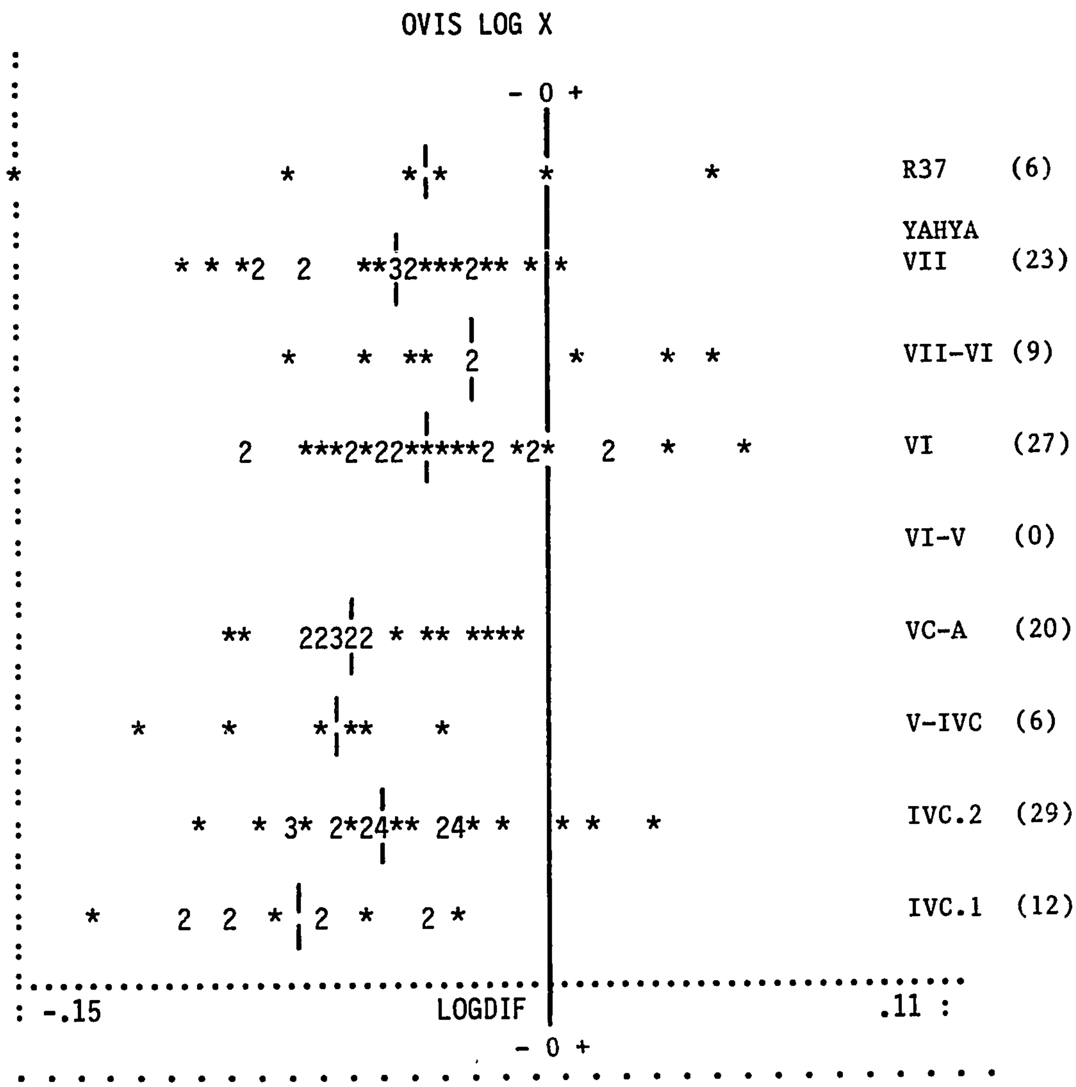

OVIS LOG X
- 0 +
R37 (6)
YAHYA VII (23)
VII-VI (9)
VI (27)
VI-V (0)
VC-A (20)
V-IVC (6)
IVC.2 (29)
IVC.1 (12)
-.15
LOGDIF
.11
- 0 +

FIGURE 5.16

Diagram of log differences for Ovis sp. bones from Tepe Yahya Tepe Gaz Tavila-R37 displayed as proportions within temporal units

Notes: area under curve = 100 percent of log differences for that unit; see Figures 5.14 and 5.15 and Table 5.22; for standard see Table 5.20;

Key: arrows = median values; 0 = standard;
---- = values excepting those for Scapula and Humerus (see Figure 5.15).
____ = all values (see Figure 5.14)

FIGURE 5.16

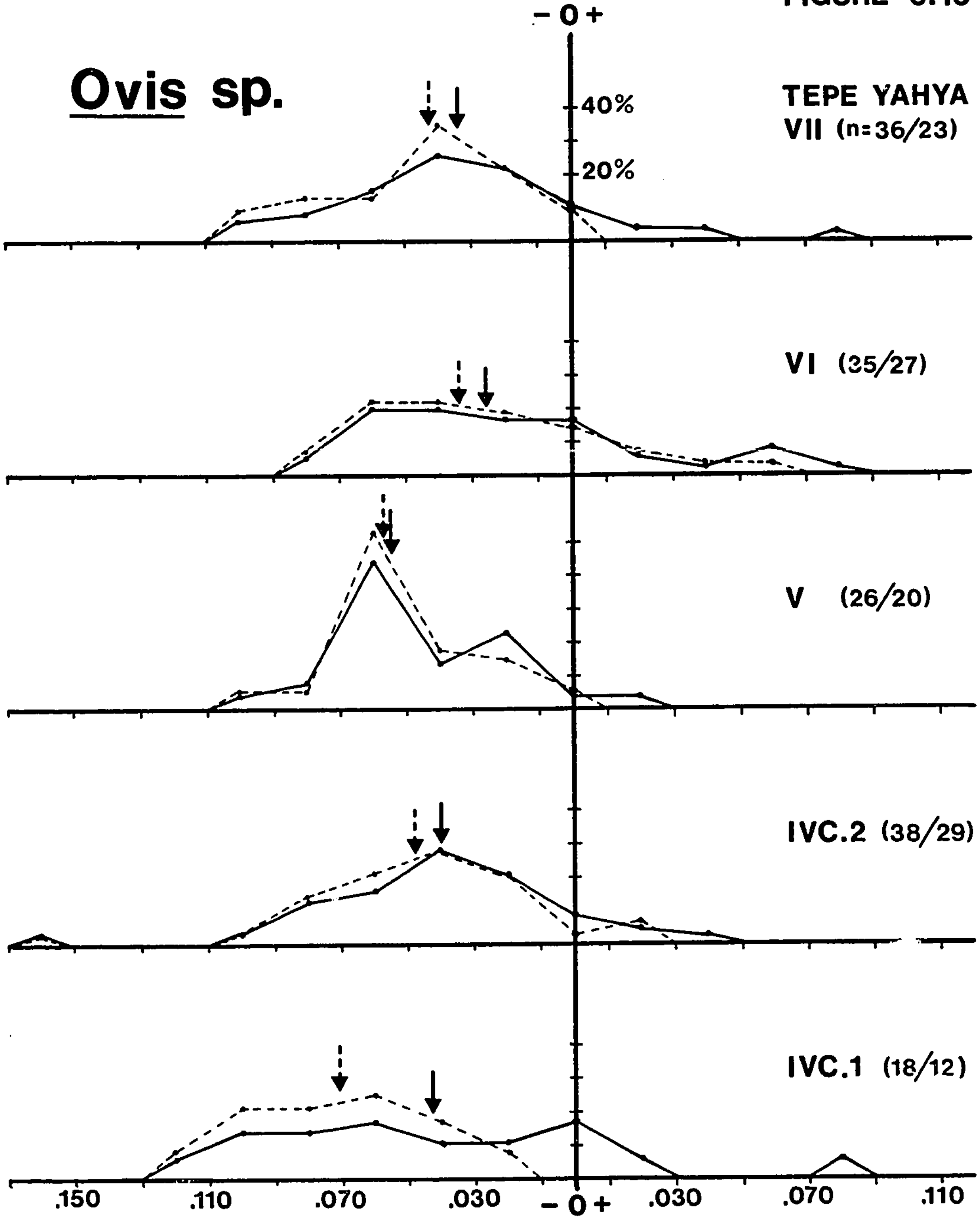
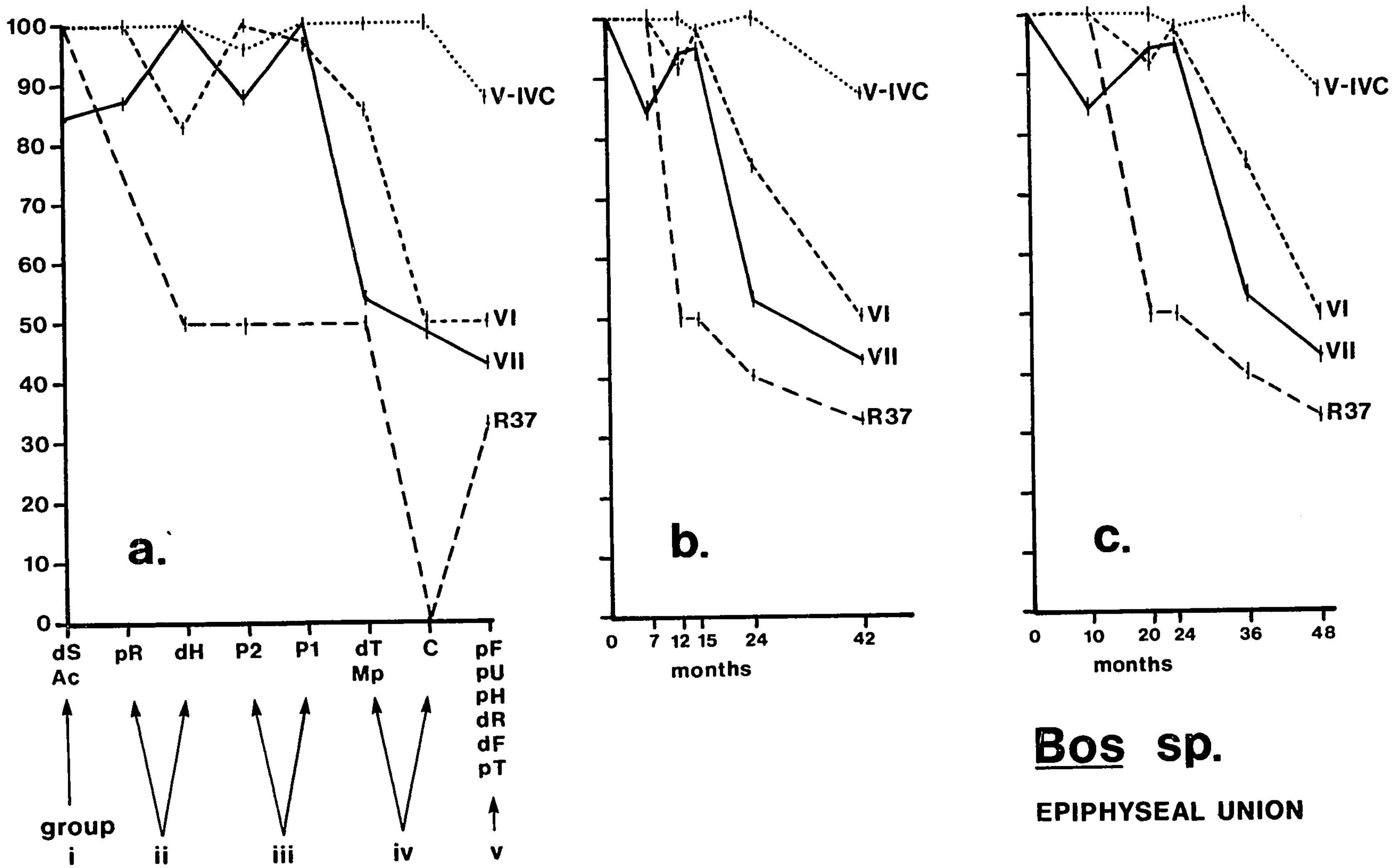

Ovis sp.
- 0 +
40%
20%
TEPE YAHYA
VII (n=36/23)
VI (35/27)
V (26/20)
IVC.2 (38/29)
IVC.1 (18/12)
.150
.110
.070
.030
- 0 +
.030
.070
.110

FIGURE 5.17

"Survivorship curves" for cattle (*Bos* sp.) from Tepe Yahya and Tepe Gaz Tavīla-R37 based on patterns of epiphyseal union

See text, Chapter 5, Section 5.5.3

FIGURE 5.17



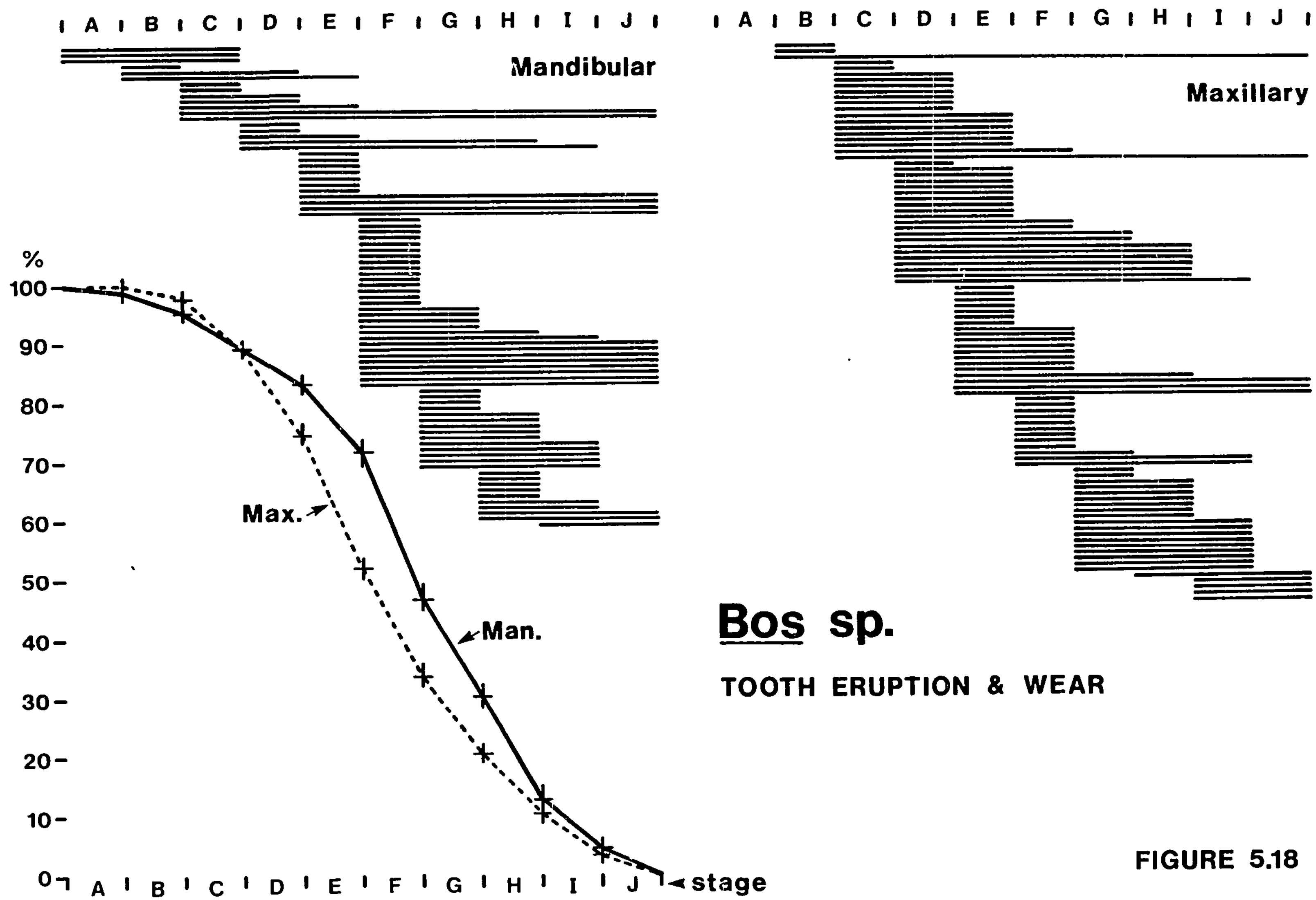
<u>Bos</u> sp.

EPIPHYSEAL UNION

FIGURE 5.18

"Survivorship curves" for cattle (Bos sp.) based on patterns of tooth eruption and wear in mandibles and maxillaries from Tepe Yahya and Tepe Gaz Tavila-R37 plotted, with the data, according to wear stage

See text, Chapter 5, Section 5.5.3
Each horizontal line represents a single specimen that extends through one or more stages based on state of eruption and wear
See Table 5.26 for definition of stages



Bos **sp.**

TOOTH ERUPTION & WEAR

FIGURE 5.18

FIGURE 5.19

"Survivorship curves" for cattle (*Bos* sp.) based on patterns of tooth eruption and wear in mandibles and maxillaries from Tepe Yahya, periods VII, VI, and V-IVC plotted by wear stage

See text, Chapter 5, Section 5.5.3

FIGURE 5.19

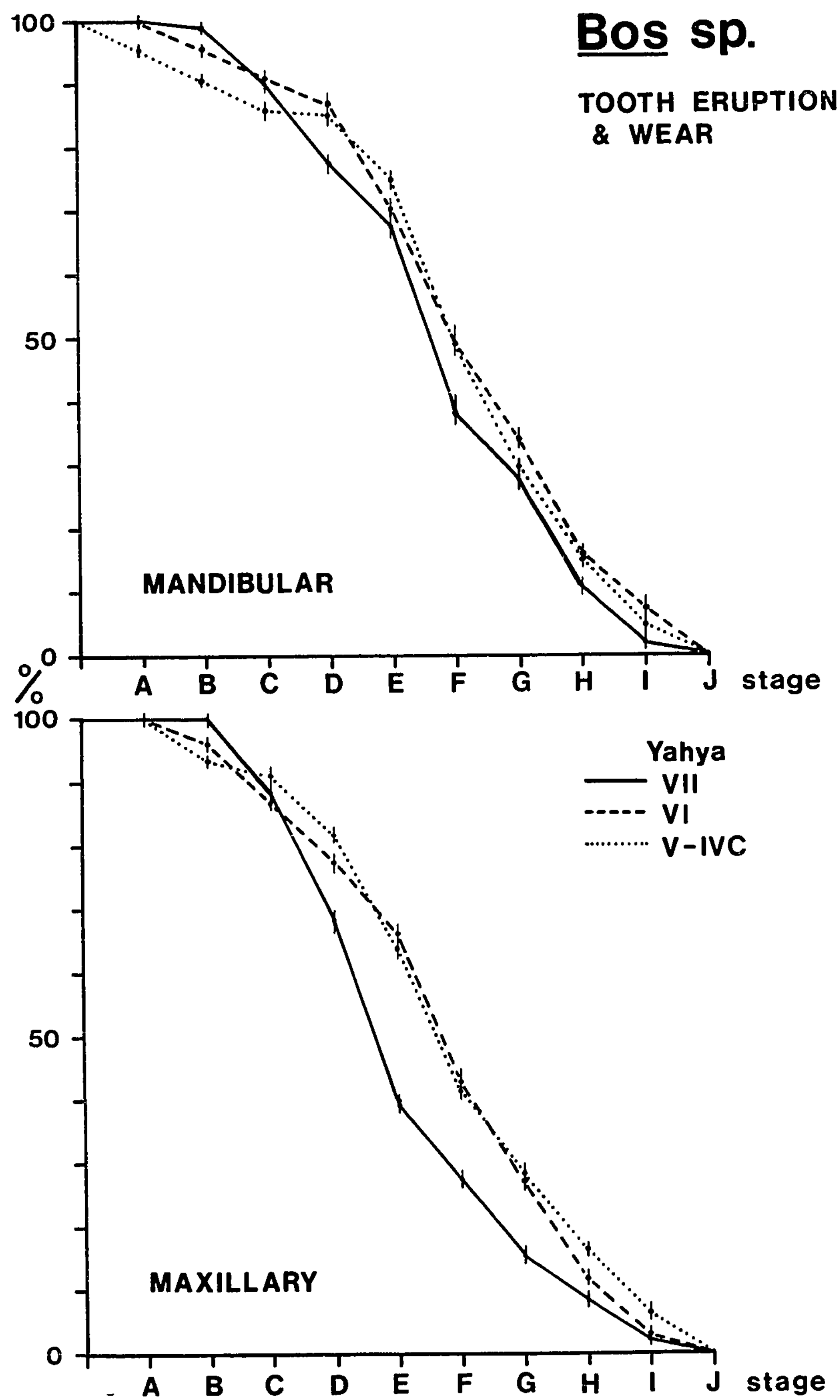

Bos sp.
TOOTH ERUPTION
& WEAR
100
50
0
MANDIBULAR
A B C D E F G H I J stage
%
100
50
0
MAXILLARY
A B C D E F G H I J stage
Yahya
VII
VI
V-IVC

FIGURE 5.20

"Survivorship curves" for cattle (*Bos* sp.) based on patterns of tooth eruption and wear in maxillaries and maxillary cheekteeth from Tepe Yahya, periods VII, VI, and V-IVC, plotted by estimated ages

See text, Chapter 5, Section 5.5.3

FIGURE 5.20

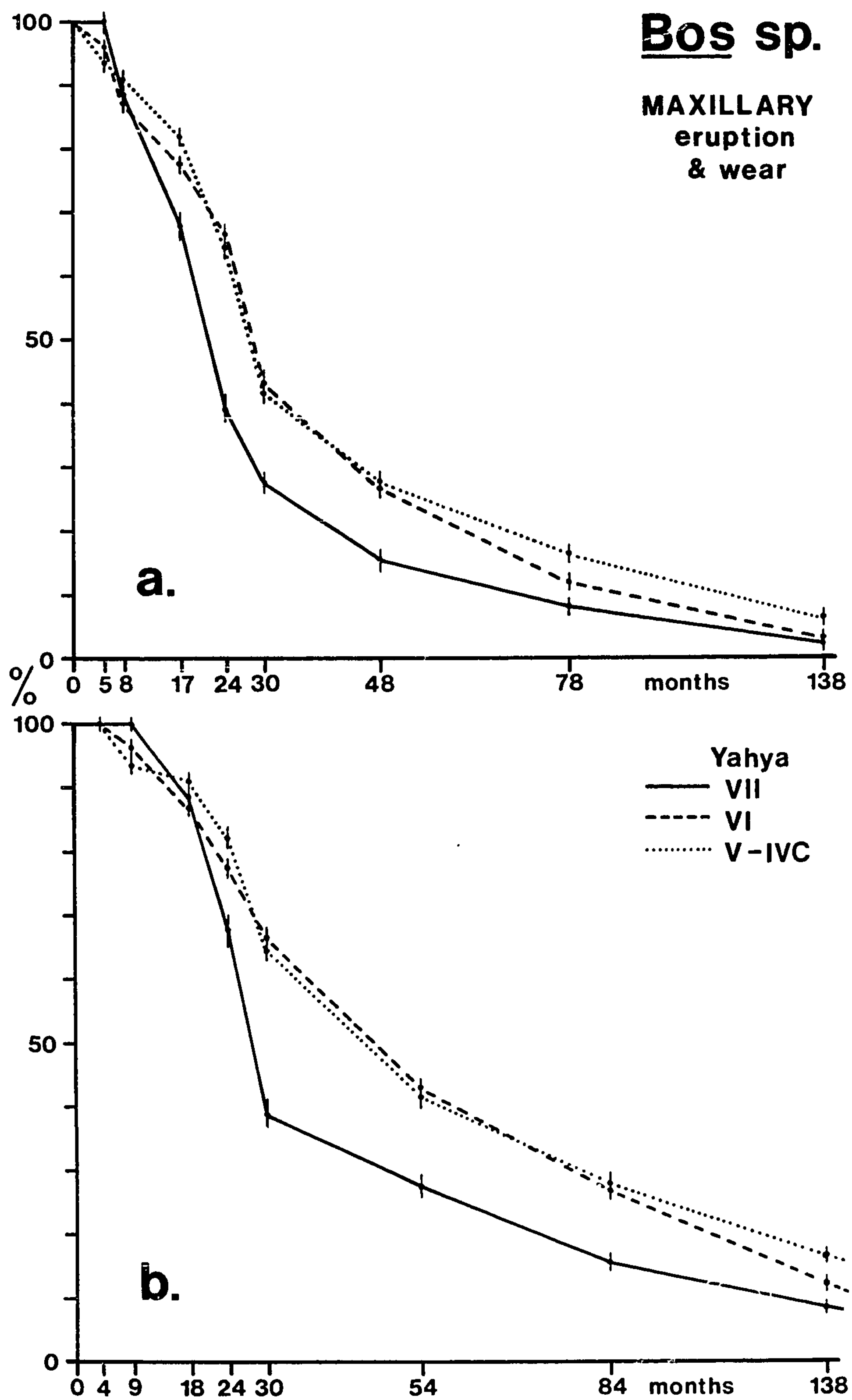

Bos sp.
MAXILLARY
eruption
& wear
a.
100
50
0
%
0 5 8 17 24 30 48 78 months 138
b.
100
50
0
0 4 9 18 24 30 54 84 months 138
Yahya
VII
VI
V-IVC

FIGURE 5.21

"Survivorship curves" for cattle (Bos sp.) based on patterns of tooth eruption and wear in mandibles and mandibular cheekteeth from Tepe Yahya, periods VII, VI, and V-IVC, plotted by estimated ages

See text, Chapter 5, Section 5.5.3

FIGURE 5.21

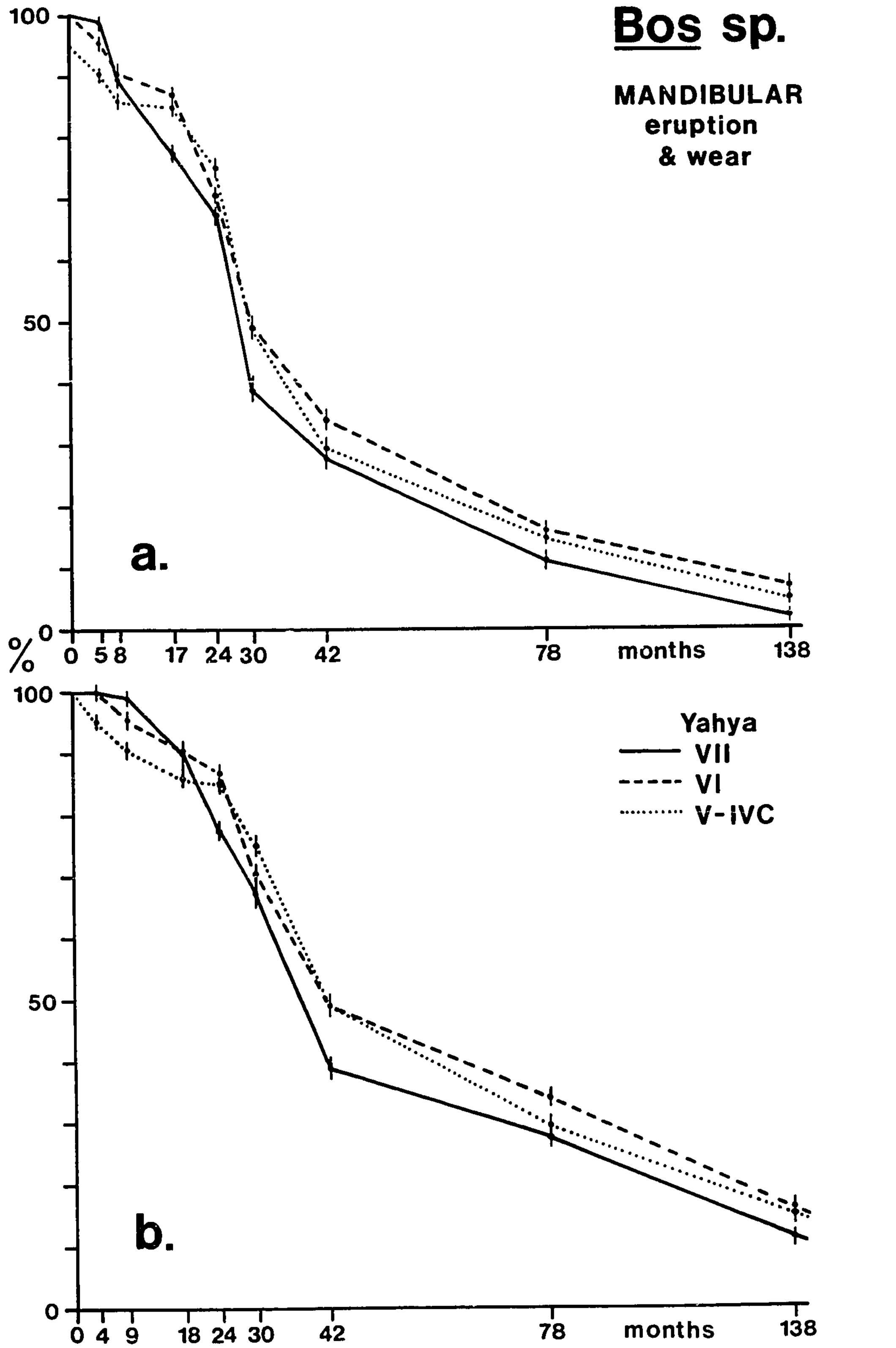

Bos sp.
MANDIBULAR
eruption
& wear
a.
100
50
0
%
0 5 8 17 24 30 42 78 months 138
b.
100
50
0
0 4 9 18 24 30 42 78 months 138
Yahya
VII
VI
V-IVC

FIGURE 5.22

"Survivorship curves", plotted by lower and higher age range estimates, for caprines (*Ovis* sp. and *Capra* sp.) from Tepe Yahya, periods VII and VI, and Tepe Gaz Tavila-R37 based on patterns of epiphyseal union

See text, Chapter 5, Section 5.5.3

FIGURE 5.22

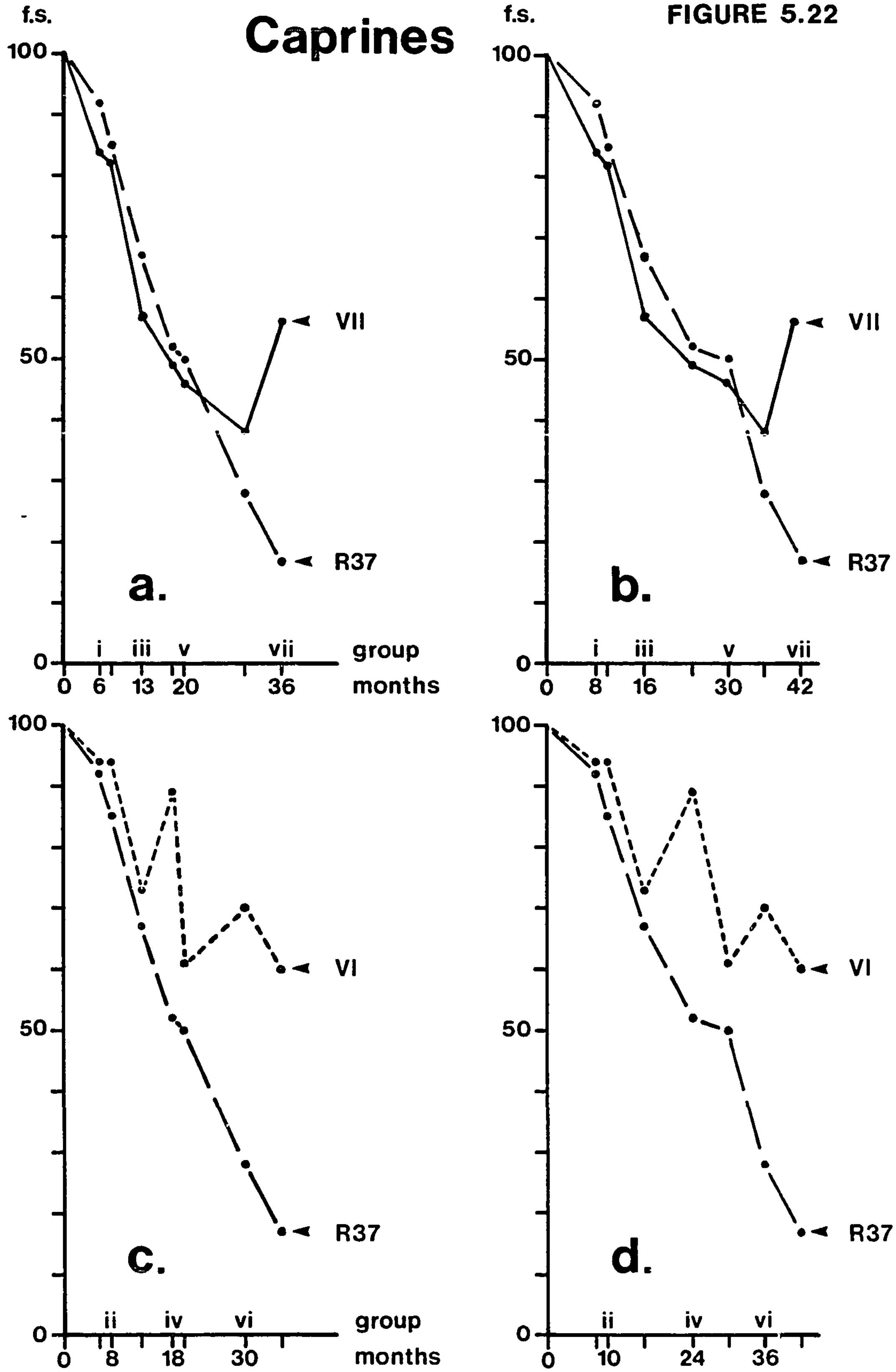

f.s.
Caprines
100
50
0
VII
R37
a.
i
iii
v
vii
group
0
6
13
20
36
months
f.s.
100
50
0
VII
R37
b.
i
iii
v
vii
0
8
16
30
42
100
50
0
VI
R37
c.
ii
iv
vi
group
0
8
18
30
months
100
50
0
VI
R37
d.
ii
iv
vi
0
10
24
36

FIGURE 5.23

"Survivorship curves", plotted by lower and higher age range estimates, for caprines (*Ovis* sp. and *Capra* sp.) from Tepe Yahya, periods V and IVC, and Tepe Gaz Tavila-R37 based on patterns of epiphyseal union

See text, Chapter 5, Section 5.5.3

Caprines

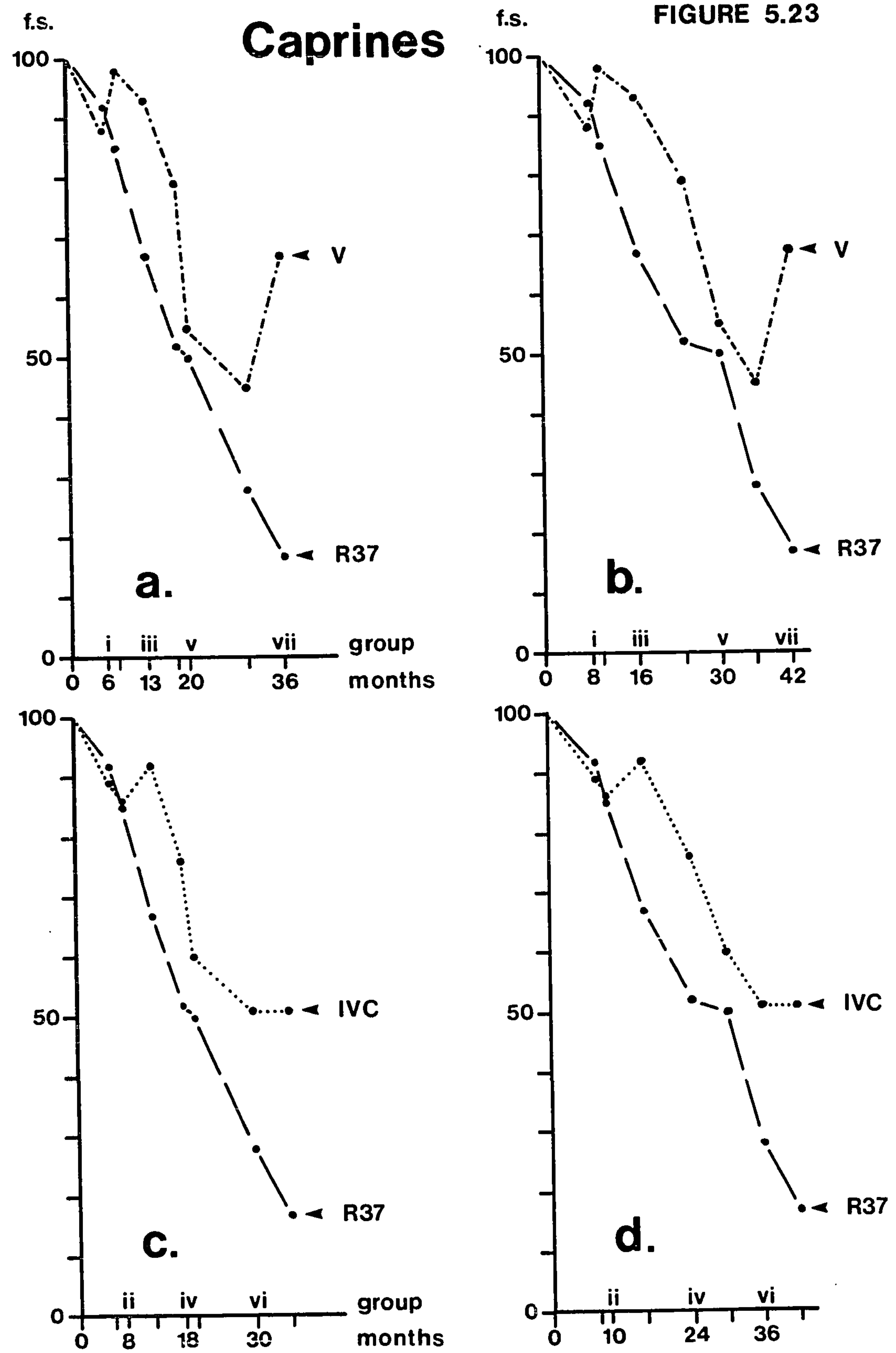

f.s.
100
50
0
V
R37
a.
i iii v vii group
0 6 13 20 36 months
f.s.
100
50
0
V
R37
b.
i iii v vii
0 8 16 30 42
100
50
0
IVC
R37
c.
ii iv vi group
0 8 18 30 months
100
50
0
IVC
R37
d.
ii iv vi
0 10 24 36

FIGURE 5.24

"Survivorship curves", plotted by higher age range estimates, and eruption/wear stage frequency distributions for caprines (*Ovis* sp. and *Capra* sp.) based on patterns of tooth eruption and wear in mandibles from Tepe Yahya and Tepe Gaz Tavila-R37

See text, Chapter 5, Section 5.5.3
Based on data in Figures 5.26-5.29

FIGURE 5.24

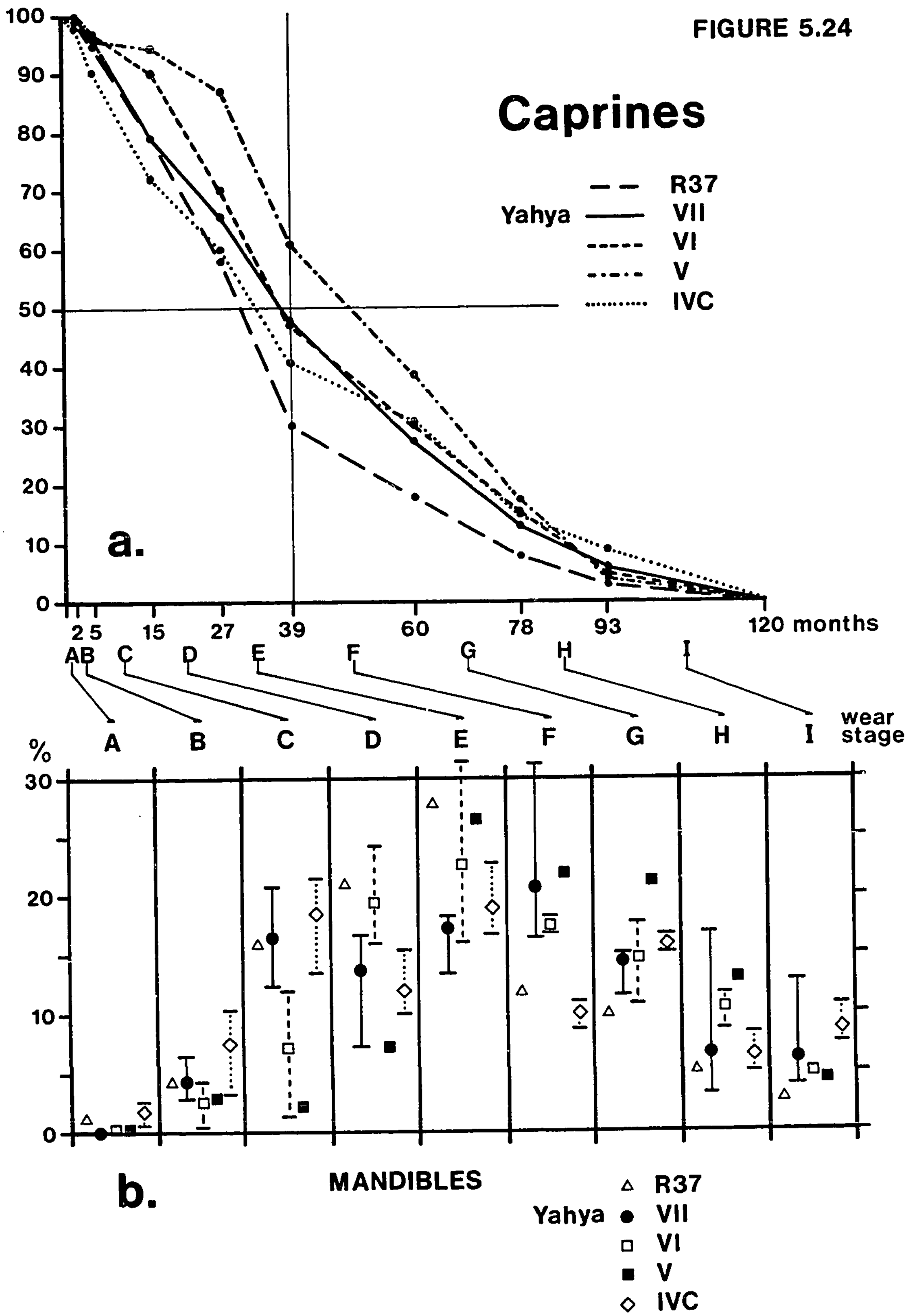

Caprines
a.
100
90
80
70
60
50
40
30
20
10
0
2 5 15 27 39 60 78 93 120 months
A B C D E F G H I
R37
Yahya VII
VI
V
IVC
b.
%
30
20
10
0
A B C D E F G H I wear stage
MANDIBLES
R37
Yahya VII
VI
V
IVC

FIGURE 5.25

"Survivorship curves", plotted by lower age range estimates and by stages, for caprines (*Ovis* sp. and *Capra* sp.) based on patterns of tooth eruption and wear in mandibles from Tepe Yahya and Tepe Gaz Tavila-R37

See text, Chapter 5, Section 5.5.3
Based on data in Figures 5.26-5.29

FIGURE 5.25

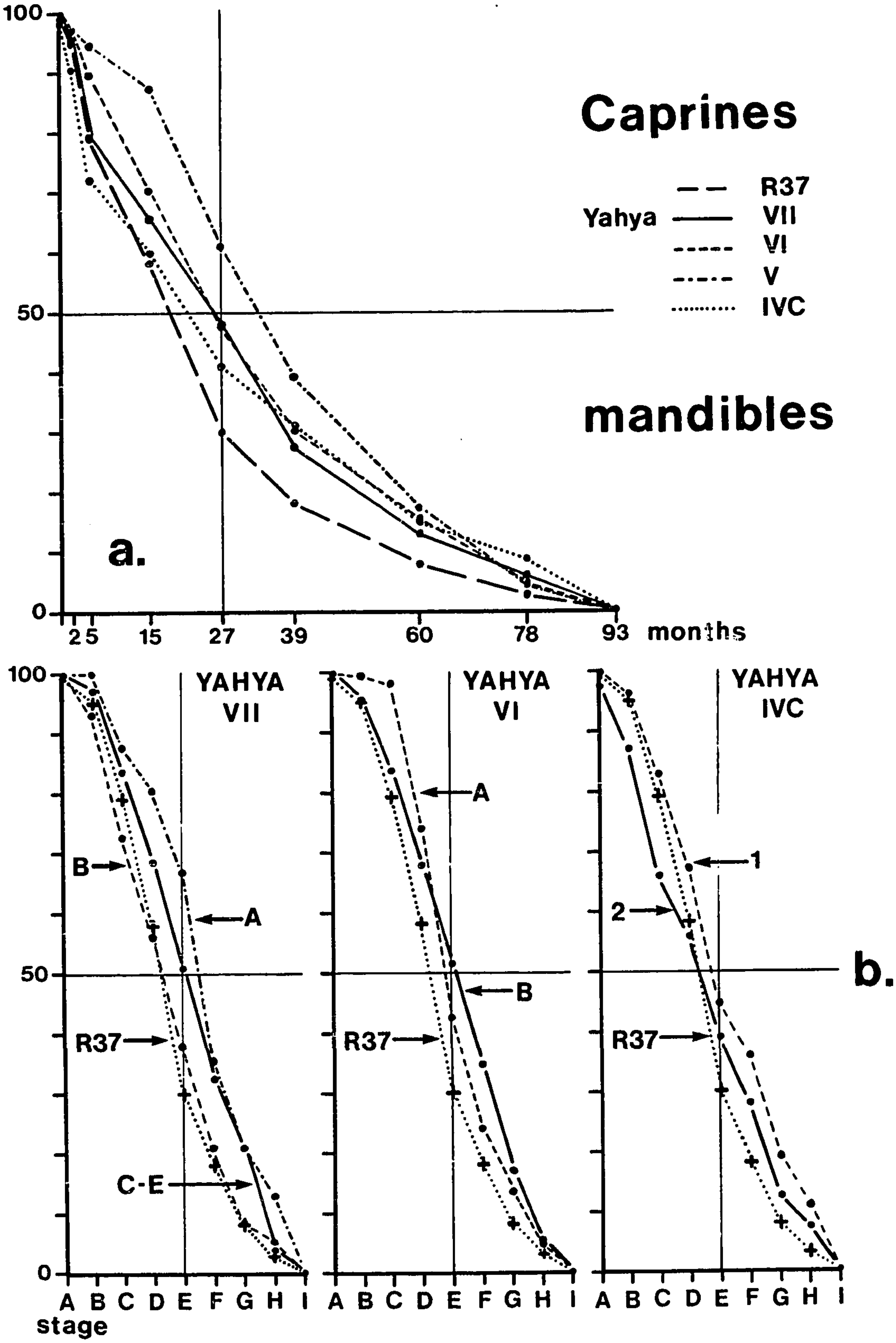

%
100
50
0
Caprines
mandibles
Yahya
R37
VII
VI
V
IVC
a.
2 5
15
27
39
60
78
93
months
YAHYA VII
YAHYA VI
YAHYA IVC
B
A
R37
C-E
1
2
b.
A B C D E F G H I
stage

FIGURE 5.26

Eruption and wear data for caprine (*Ovis* sp. and *Capra* sp.) mandibles from Tepe Gaz Tavila-R37 and Tepe Yahya period VIIE-C

Each horizontal line represents a single specimen that extends through one or more stages based on state of eruption and wear
See Table 5.29 for definition of stages

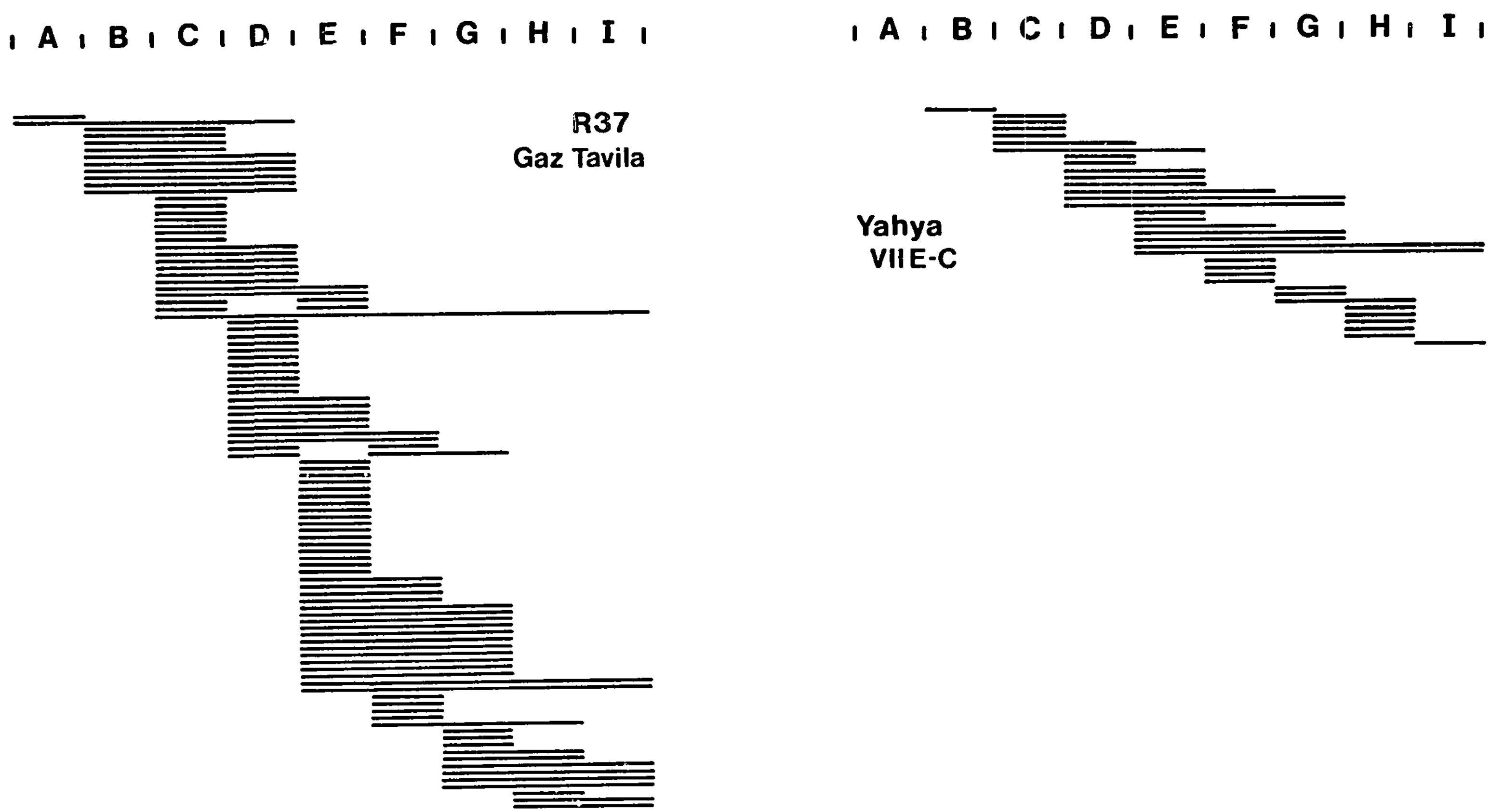


FIGURE 5.26

FIGURE 5.27

Eruption and wear data for caprine (*Ovis* sp. and *Capra* sp.) mandibles from Tepe Yahya periods VIIB, VIIB-A, VIIA, and VIIA-VI

Each horizontal line represents a single specimen that extends through one or more stages based on state of eruption and wear
See Table 5.29 for definition of stages

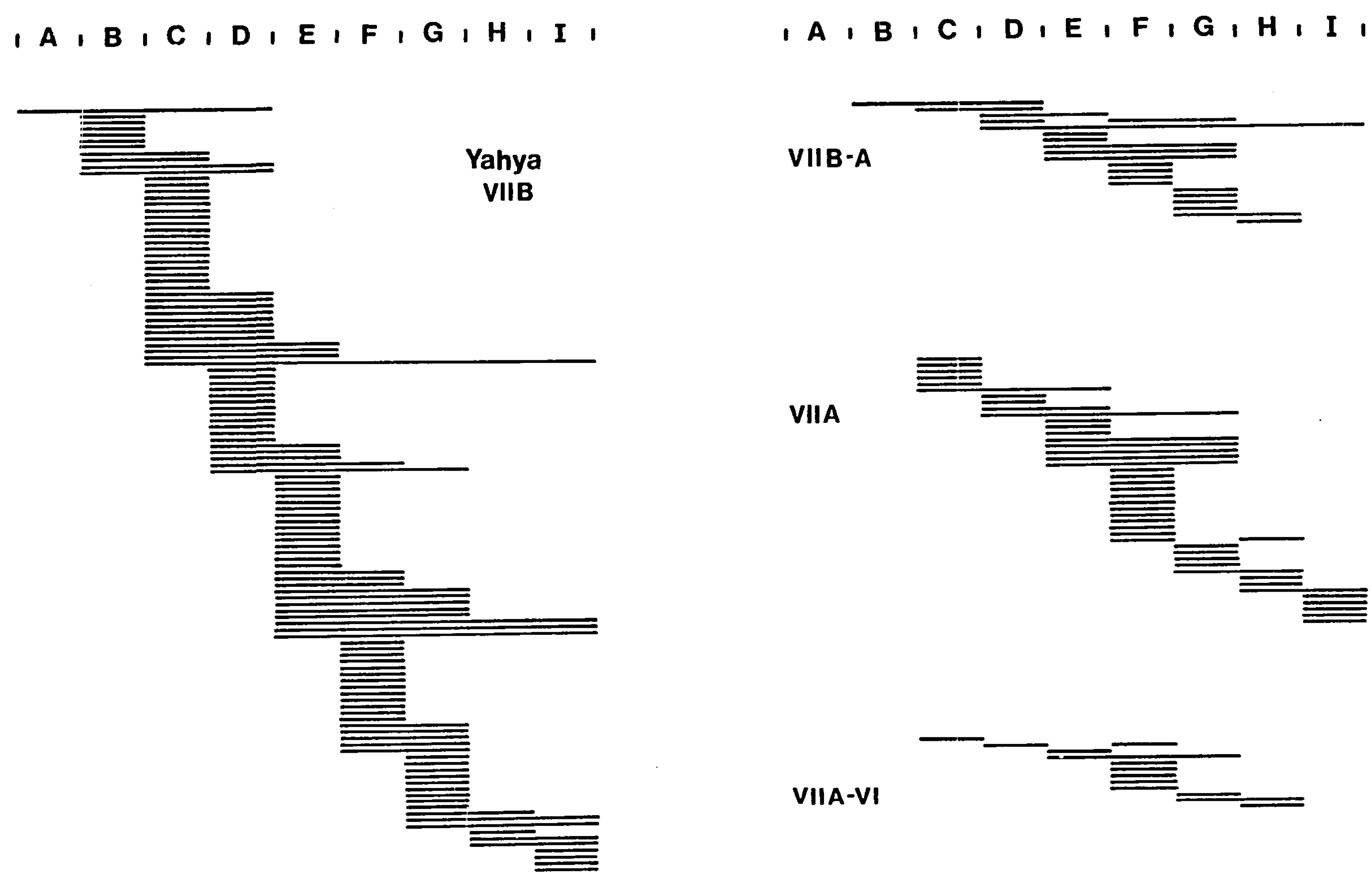


FIGURE 5.27

FIGURE 5.28

Eruption and wear data for caprine (*Ovis* sp. and *Capra* sp.) mandibles from Tepe Yahya periods VIB, VIA, and VI-VC

Each horizontal line represents a single specimen that extends through one or more stages based on state of eruption and wear
See Table 5.29 for definition of stages

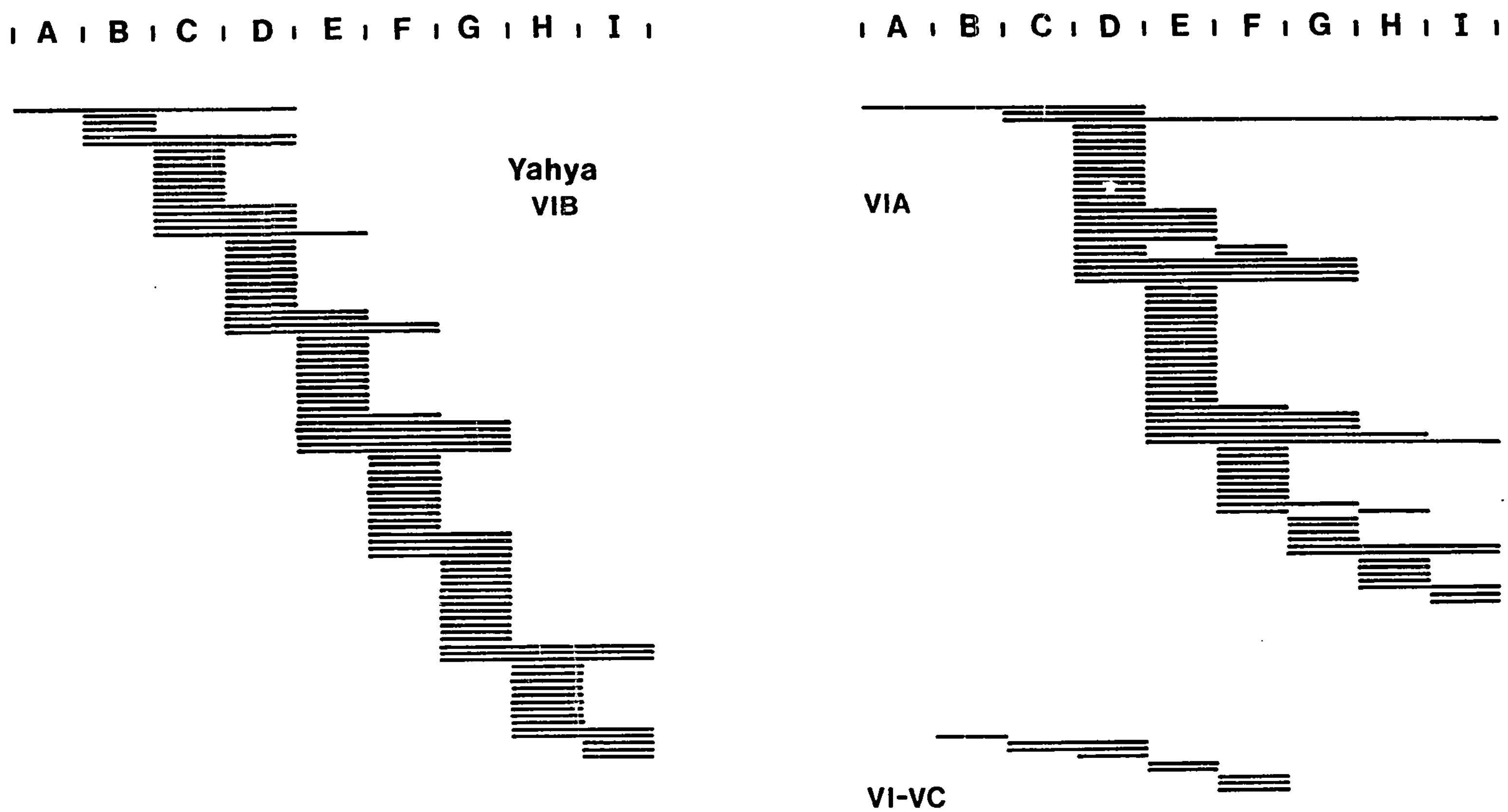


FIGURE 5.28

FIGURE 5.29

Eruption and wear data for caprine (*Ovis* sp. and *Capra* sp.) mandibles from Tepe Yahya periods V, VI/V-IVC, IVC.2, and IVC.1

Each horizontal line represents a single specimen that extends through one or more stages based on state of eruption and wear
See Table 5.29 for definition of stages

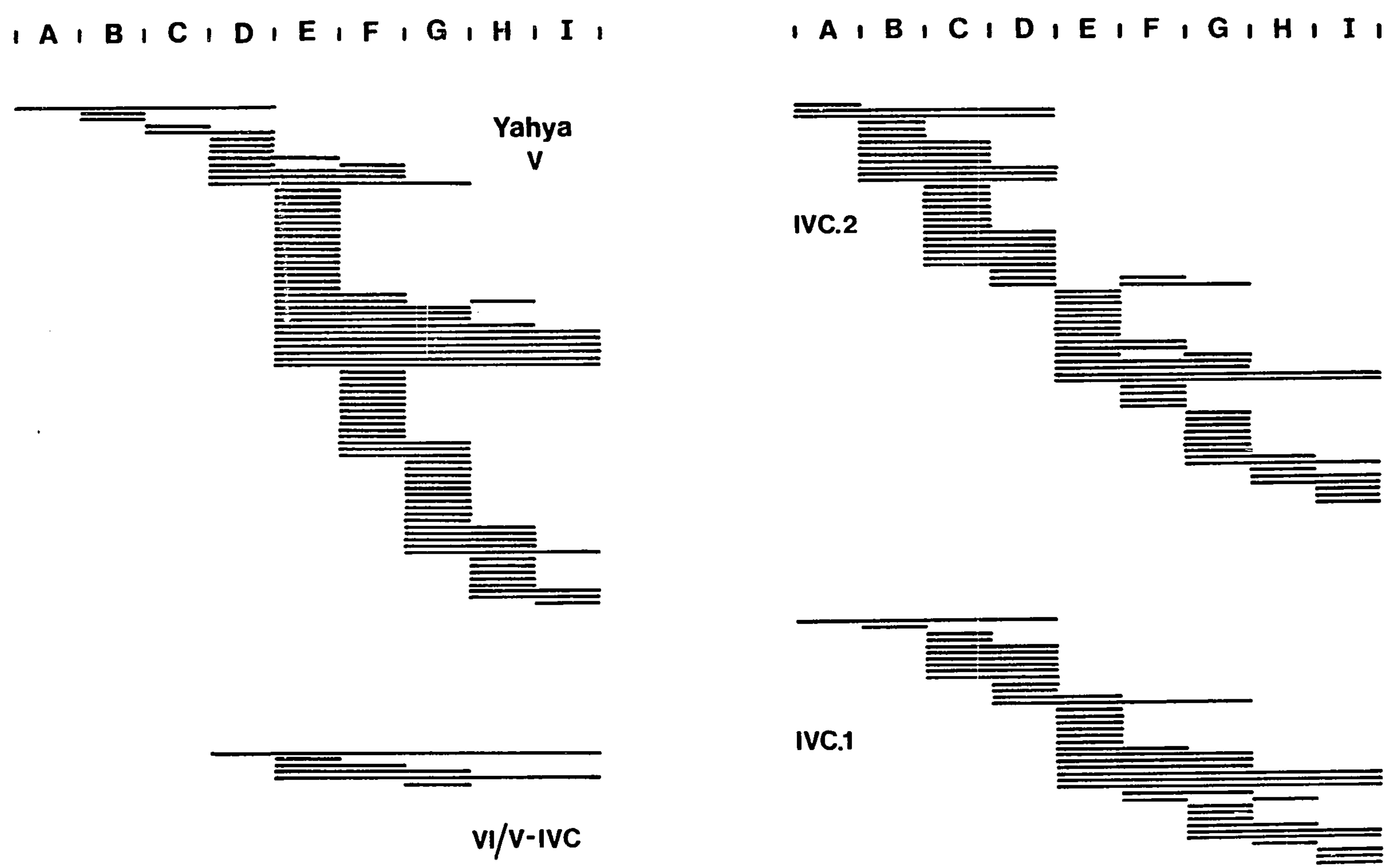


FIGURE 5.29

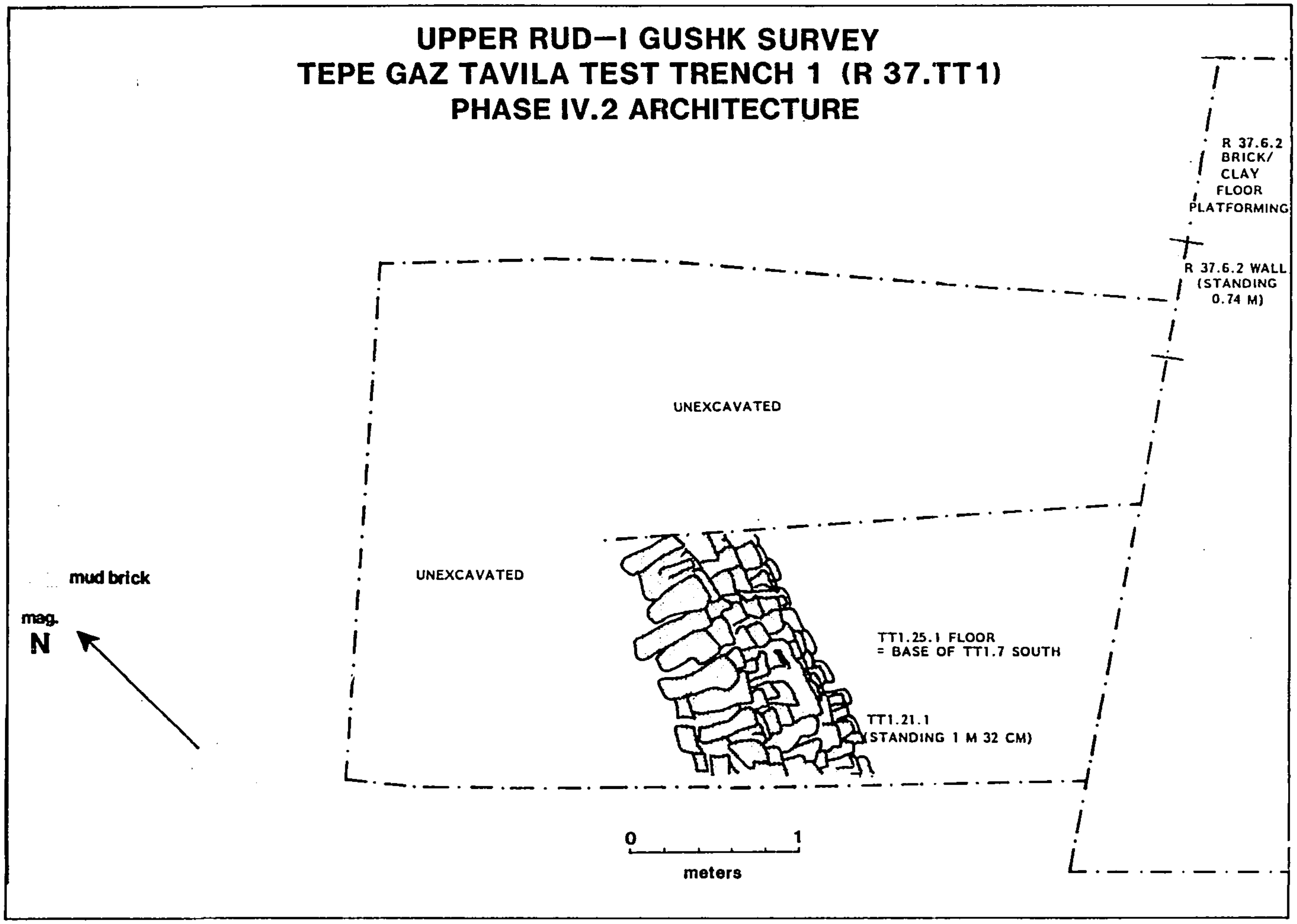


FIGURE 7.1: Tepe Gaz Tavila-R37: Plan of Phase IV.2 architecture (from Prickett (1986a: fig. I.4)).

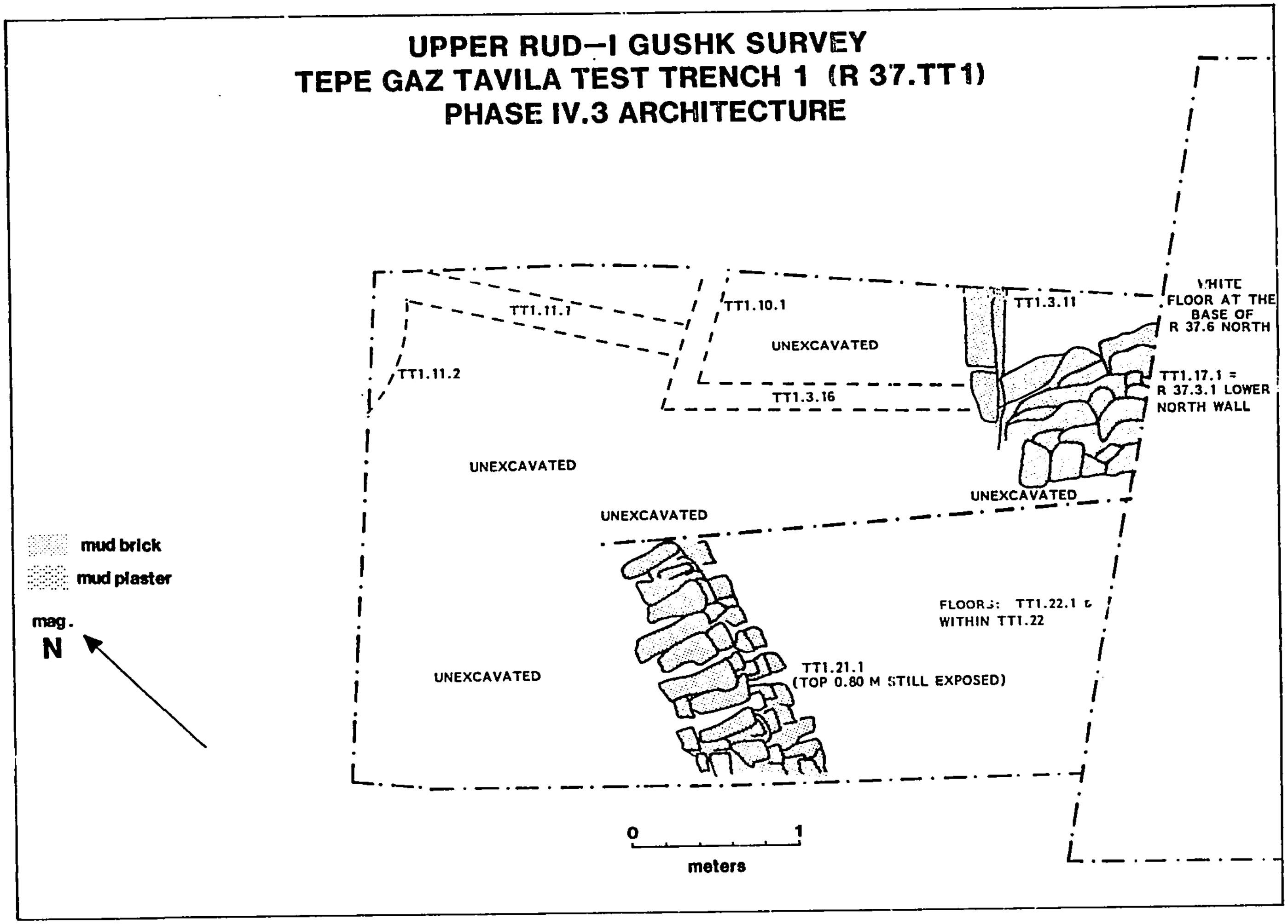


FIGURE 7.2: Tepe Gaz Tavila-R37: Plan of Phase IV.3 architecture (from Prickett (1986a: fig. I.5)).

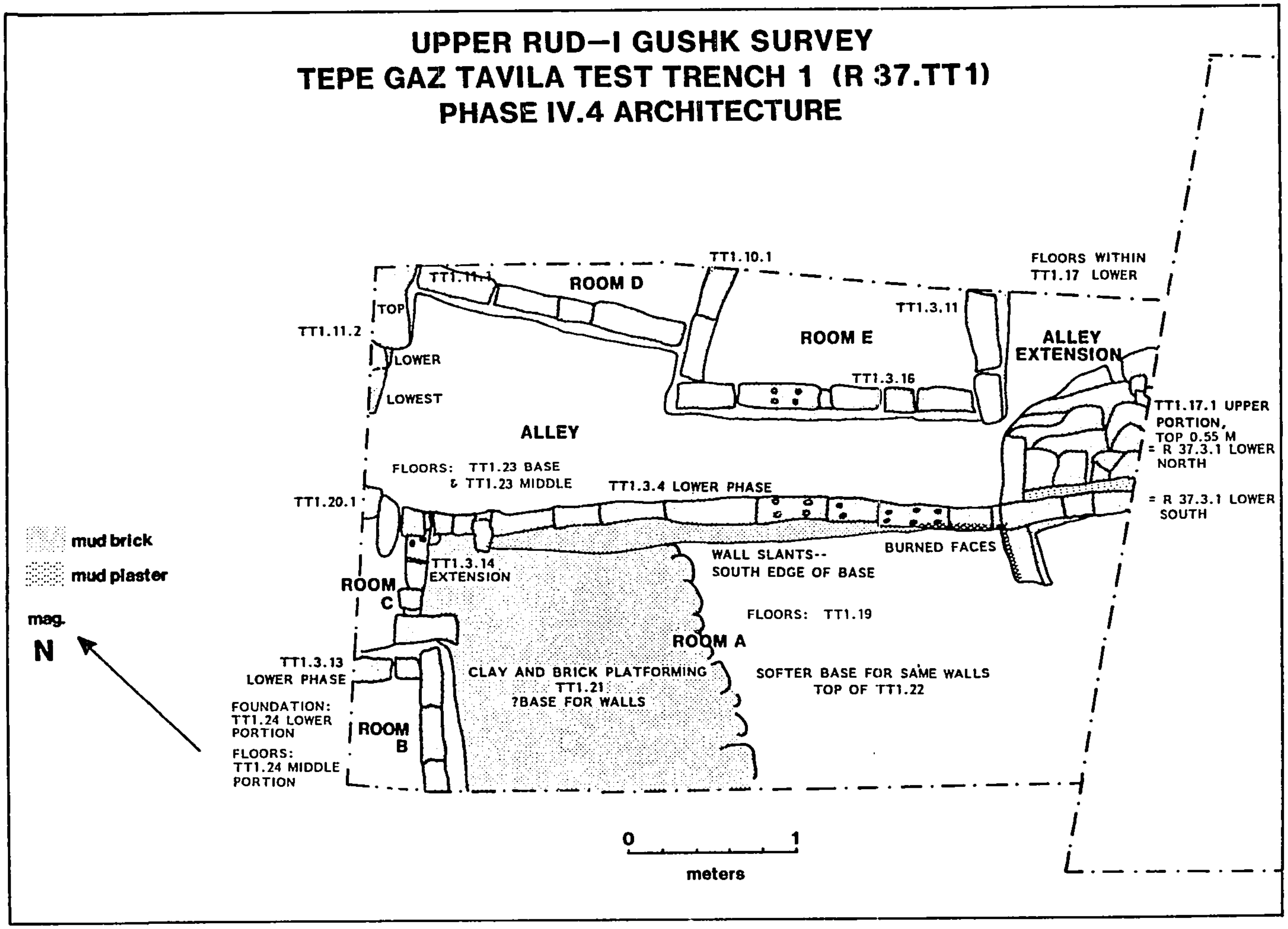


FIGURE 7.3: Tepe Gaz Tavila-R37: Plan of Phase IV.4 architecture (from Prickett (1986a: fig. I.6)).

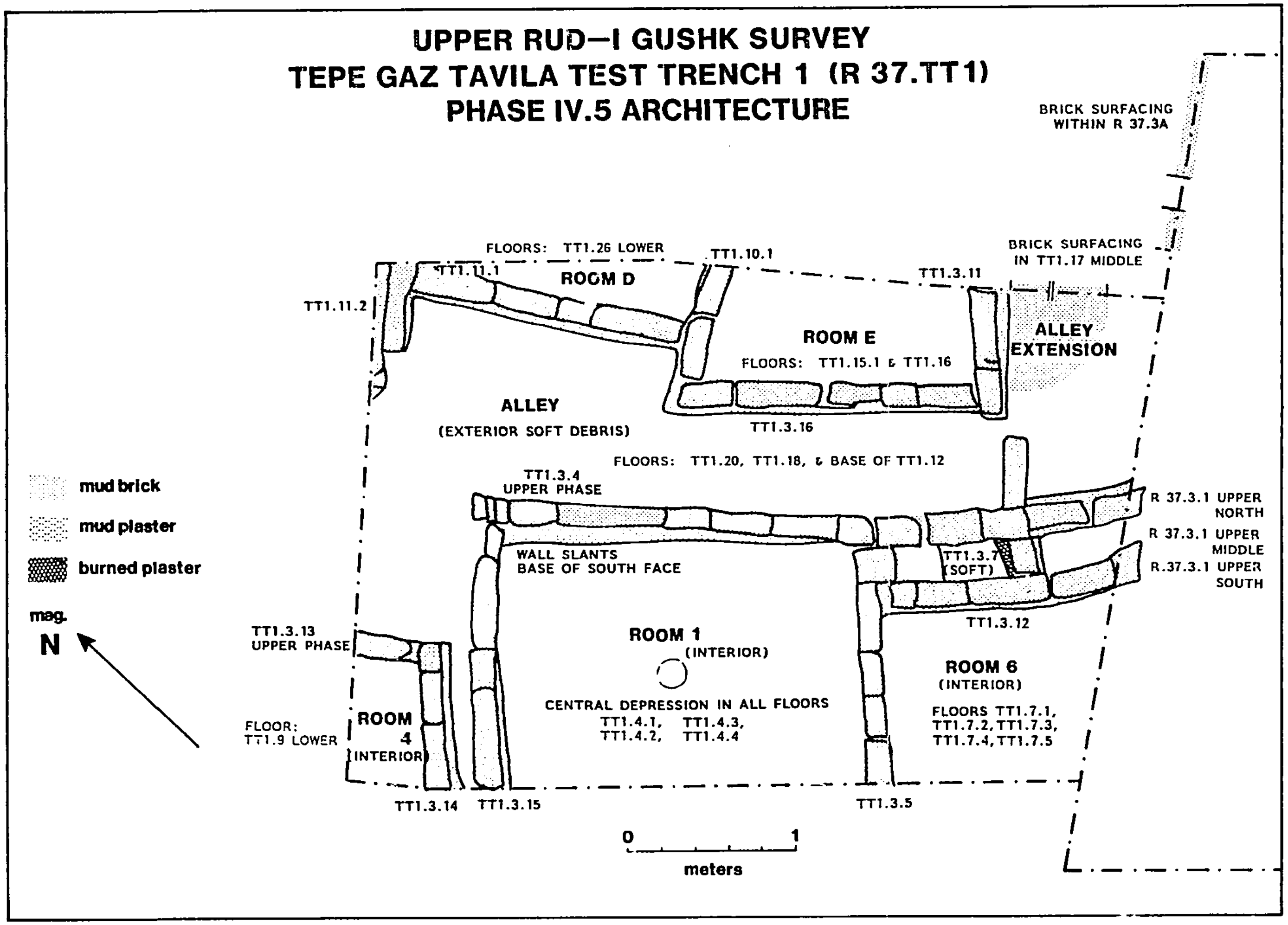


FIGURE 7.4: Tepe Gaz Tavila-R37: Plan of Phase IV.5 architecture (from Prickett (1986a: fig. I.7)).

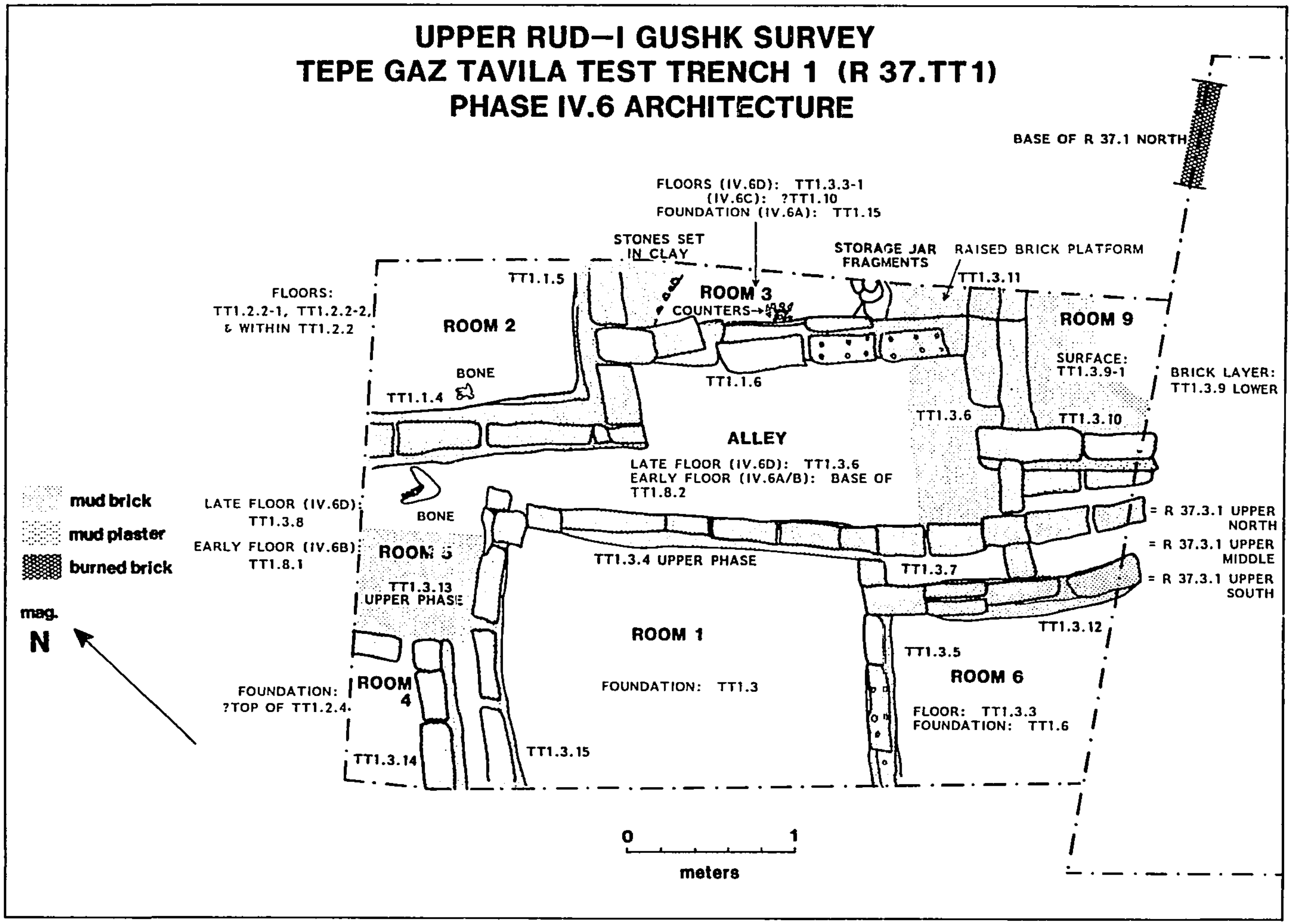


FIGURE 7.5: Tepe Gaz Tavila-R37: Plan of Phase IV.6 architecture (from Prickett (1986a: fig. I.8)).

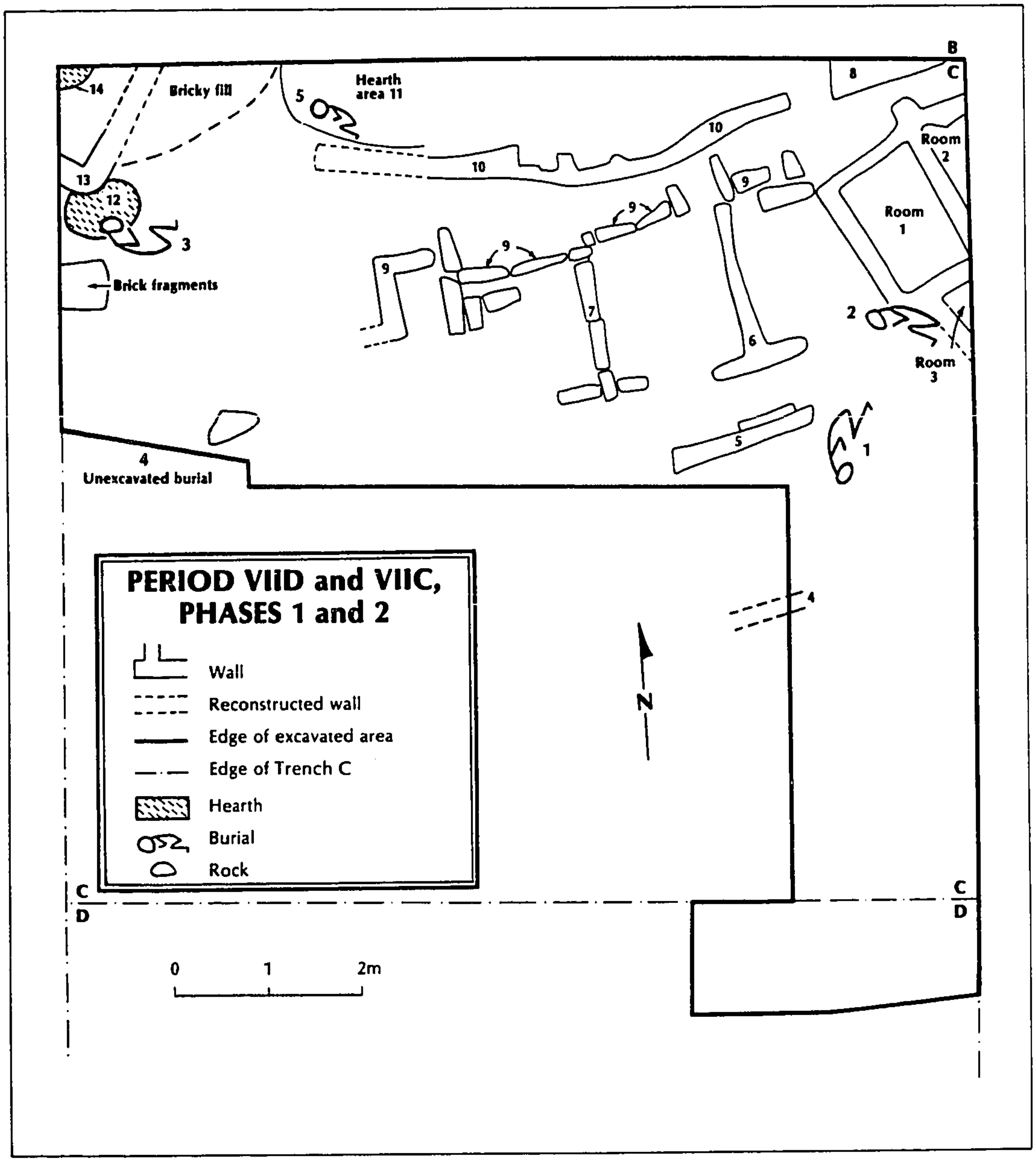


FIGURE 7.6: Tepe Yahya: Plan of Period VIID and VIIC.2-1 architecture (from Beale et al. (1986: fig. 6.1)).

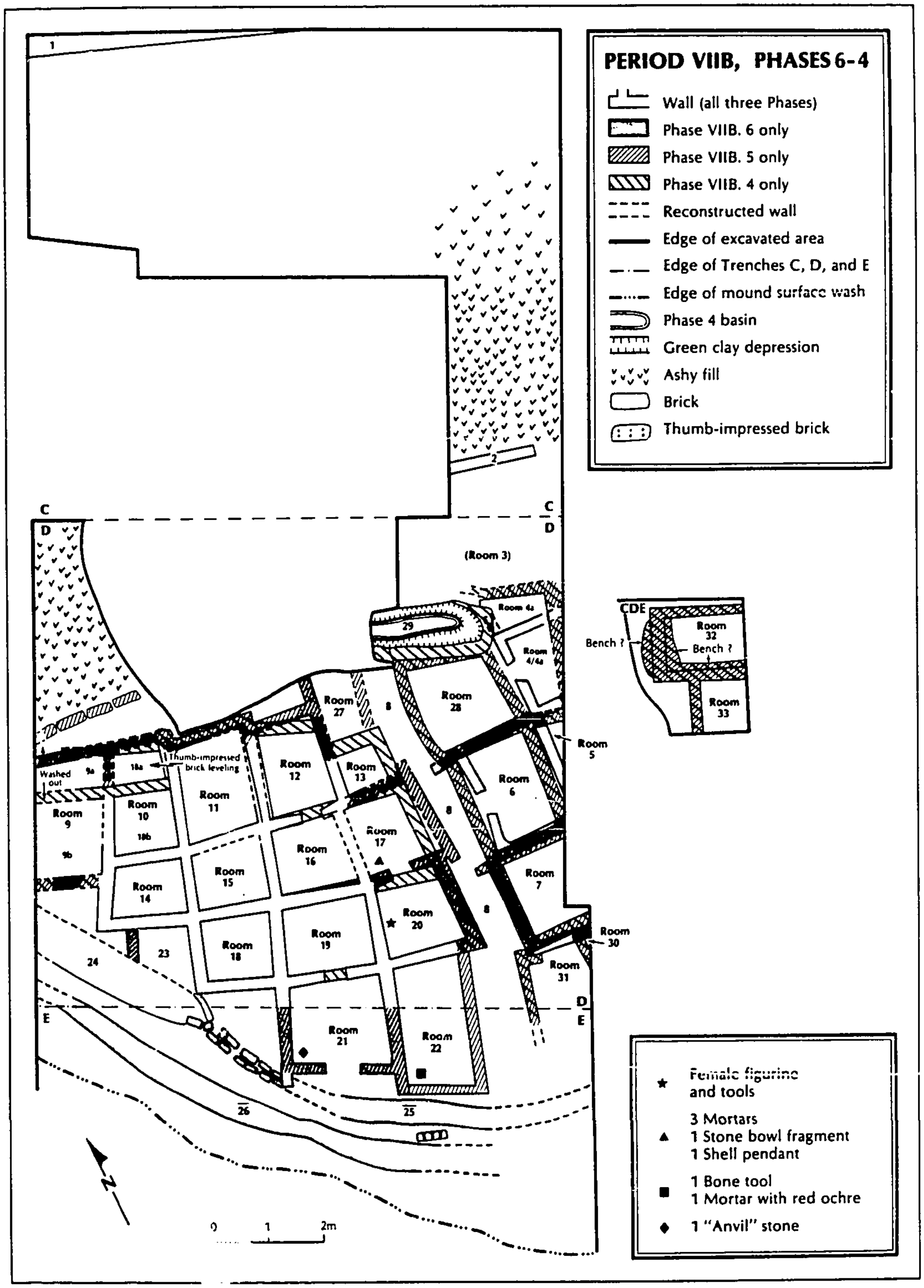


FIGURE 7.7: Tepe Yahya: Plan of Period VIIB.6-4 architecture (from Beale et al. (1986: fig. 6.6)).

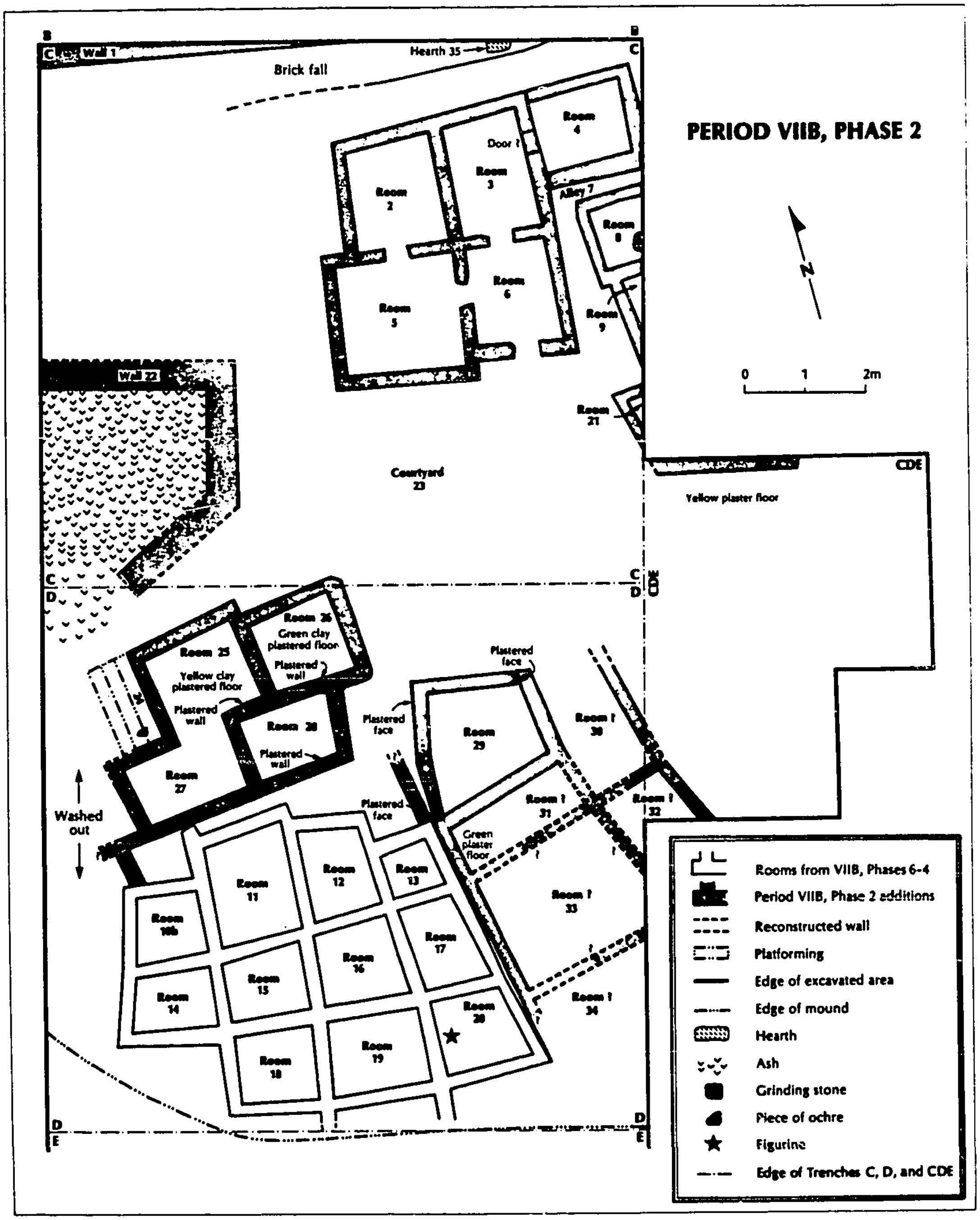


FIGURE 7.8: Tepe Yahya: Plan of Period VIIB.2 architecture (from Beale et al. (1986: fig. 6.8)).

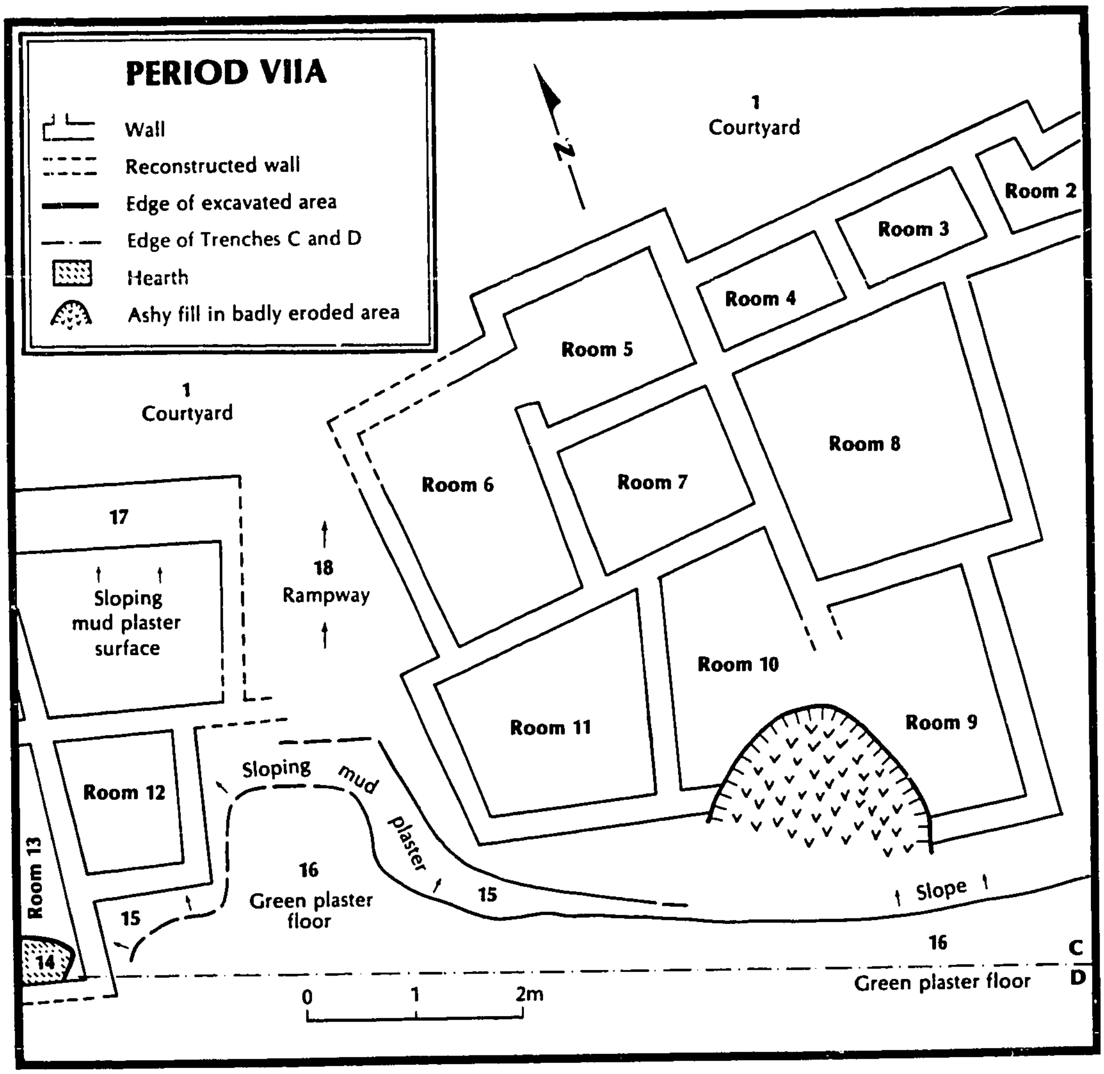


FIGURE 7.9: Tepe Yahya: Plan of Period VIIA architecture (from Beale et al. (1986: fig. 6.12)).

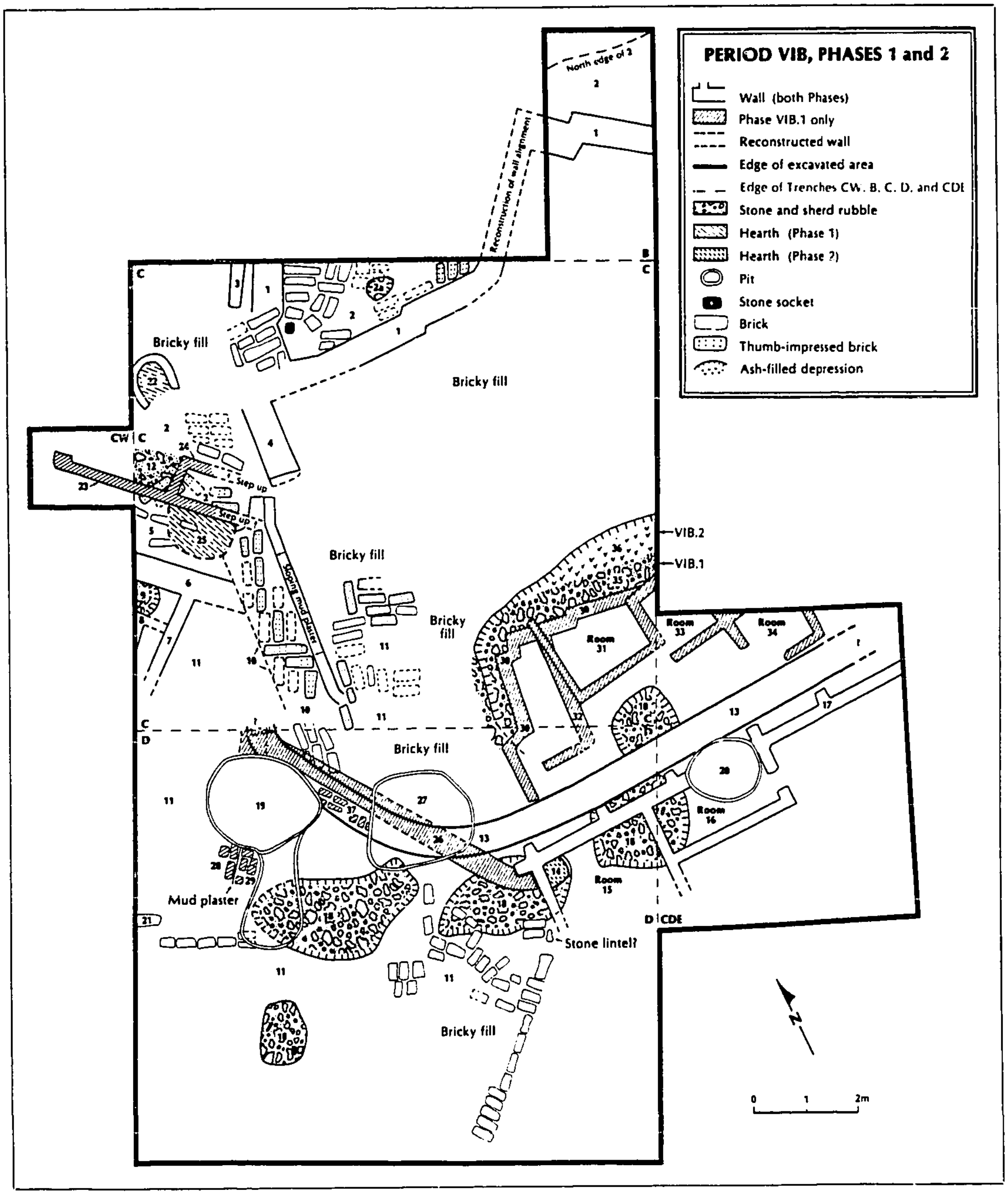


FIGURE 7.10: Tepe Yahya: Plan of Period VIB.2-1 architecture (from Beale et al. (1986: fig. 6.15)).

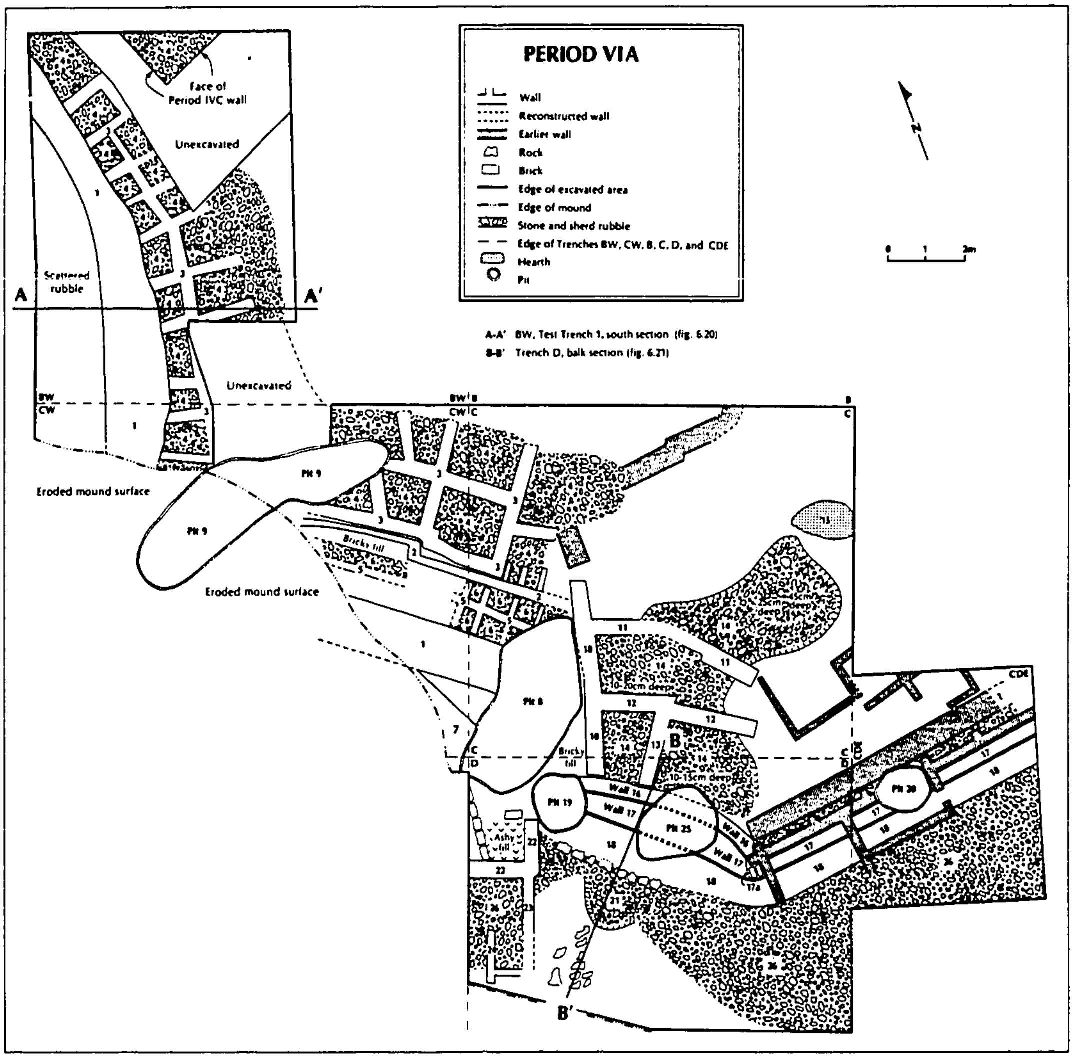


FIGURE 7.11: Tepe Yahya: Plan of Period VIA architecture (from Beale <u>et al.</u> (1986: fig. 6.16)).

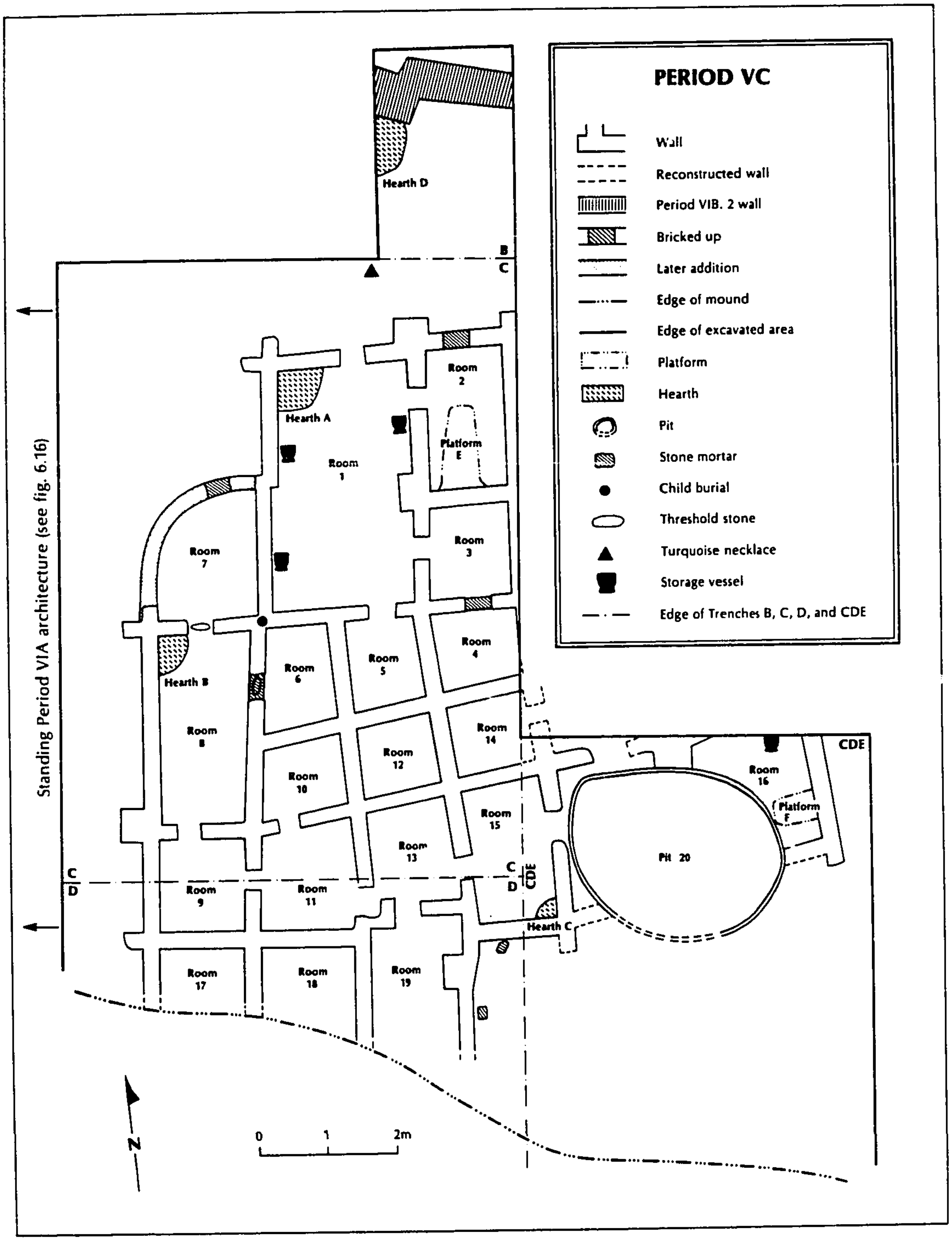


FIGURE 7.12: Tepe Yahya: Plan of Period VC architecture (from Beale et al. (1986: fig. 6.23)).

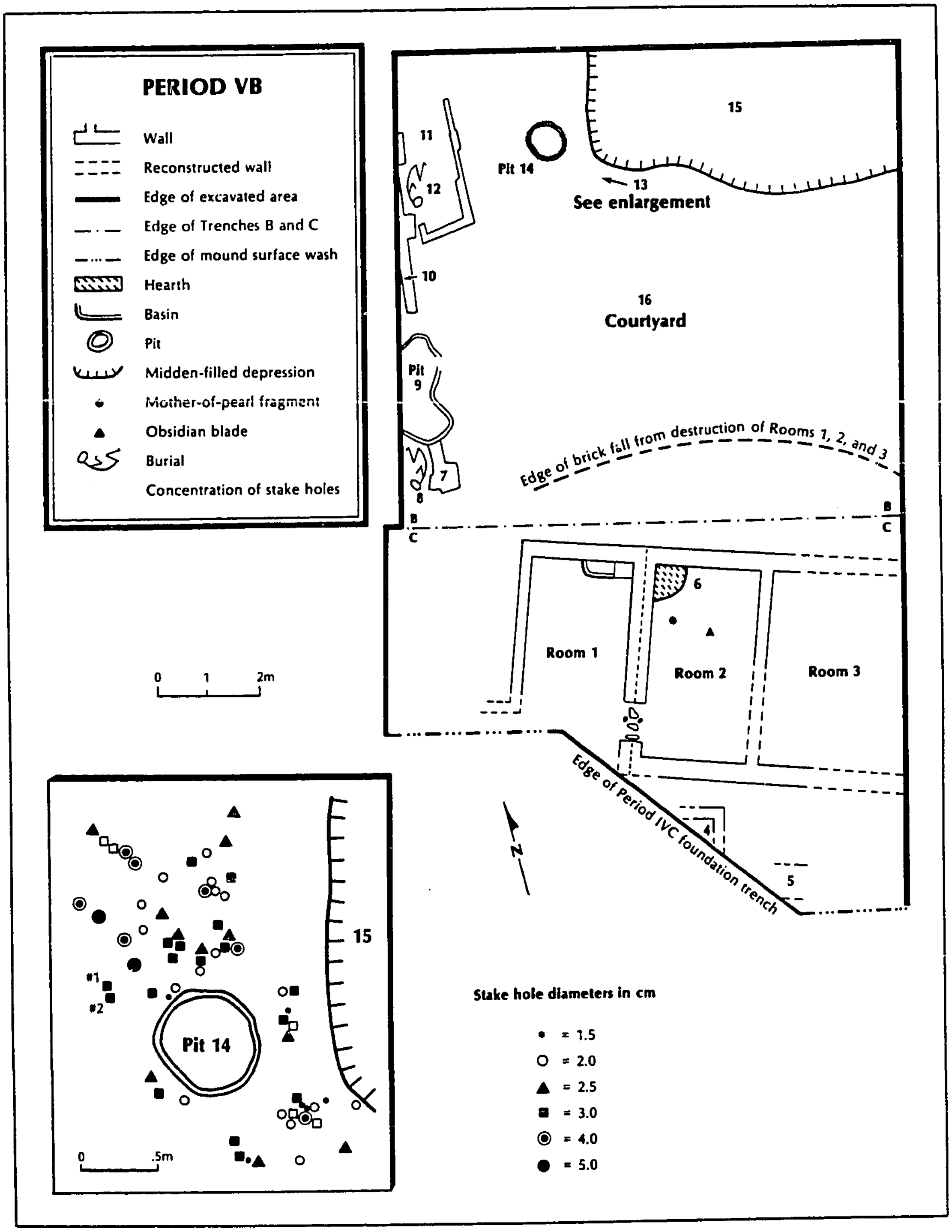


FIGURE 7.13: Tepe Yahya: Plan of Period VB architecture (from Beale et al. (1986: fig. 6.26)).

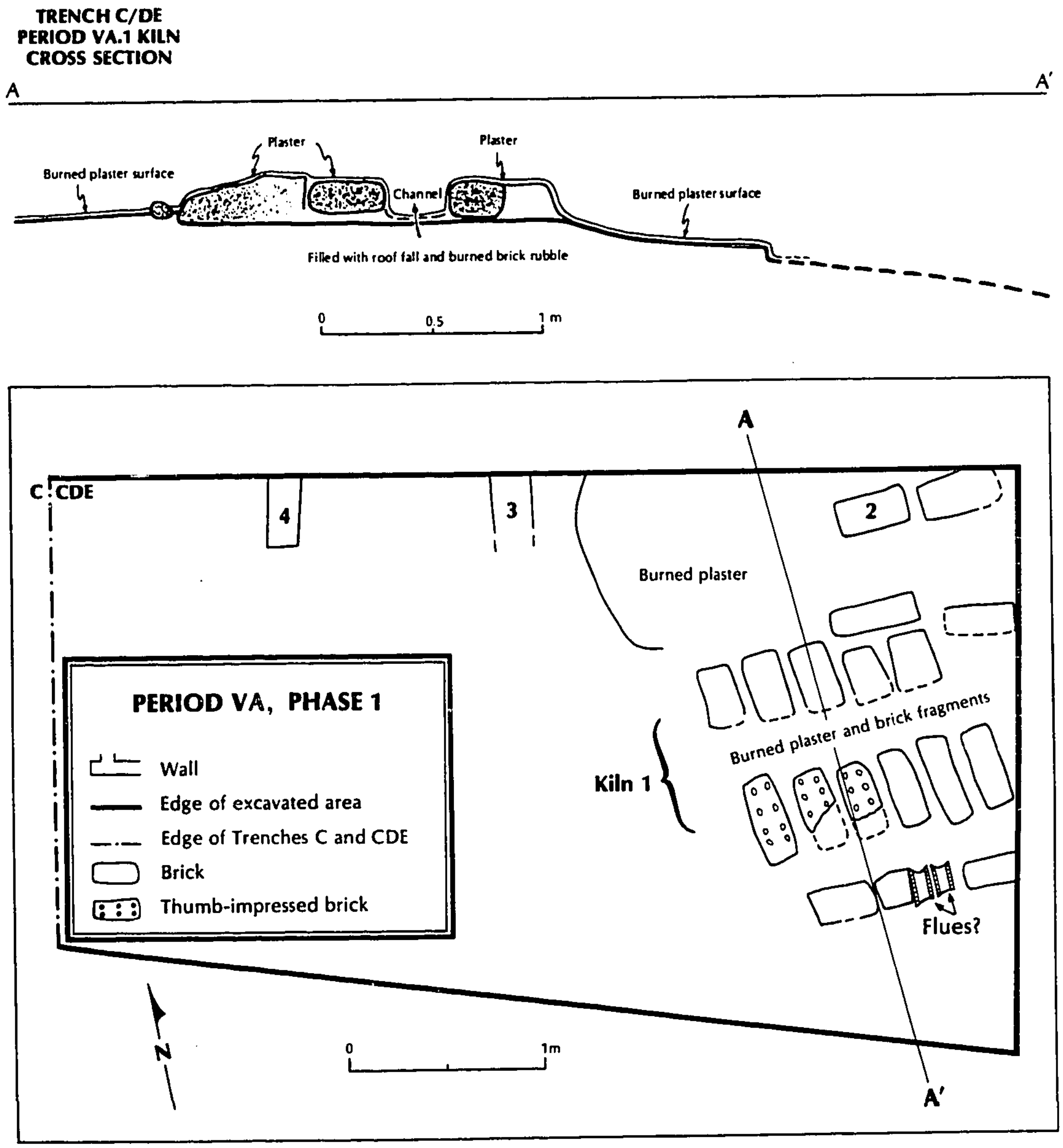


FIGURE 7.14: Tepe Yahya: Plan and Section of Period VA.1 kiln (from Beale <u>et al.</u> (1986: figs. 6.27, 6.28)).

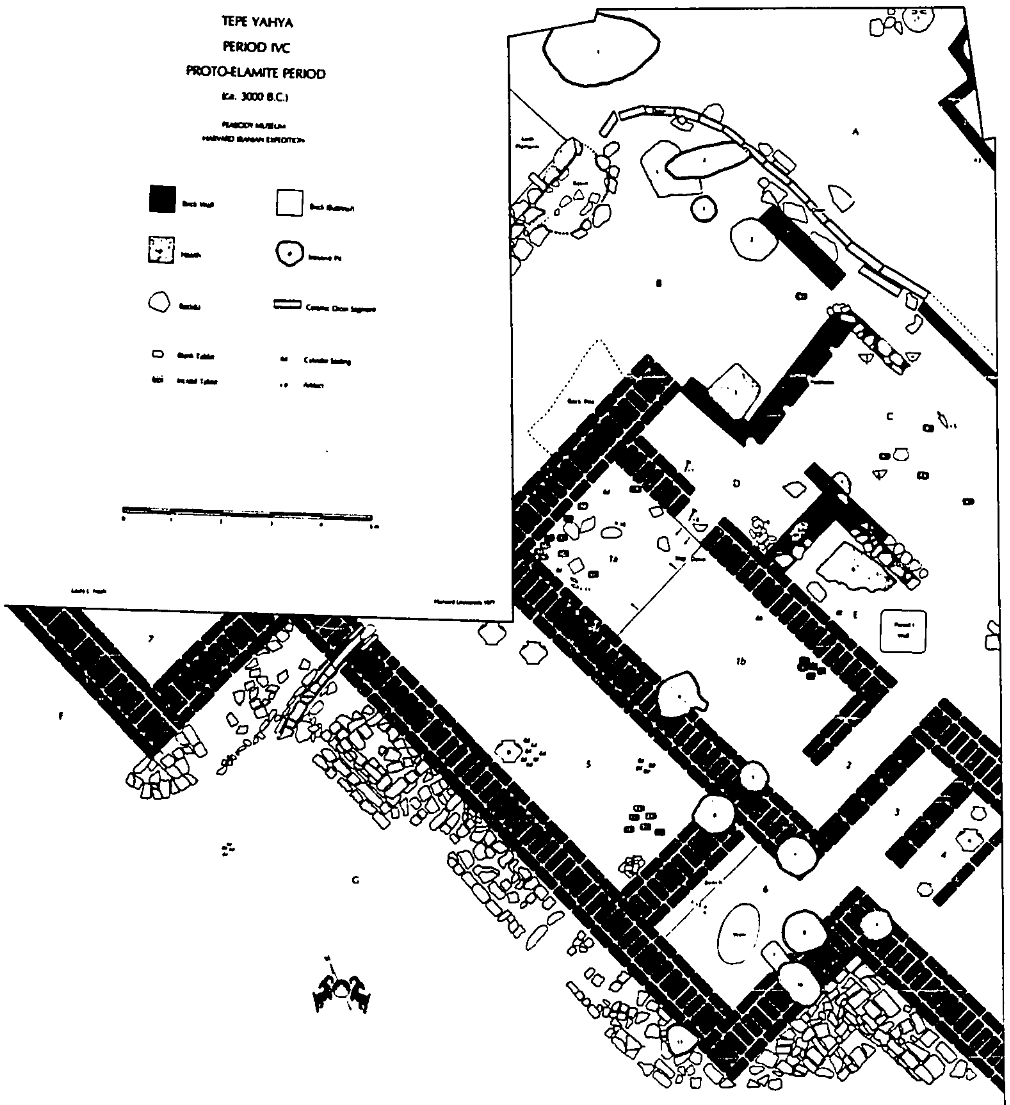


FIGURE 7.15: Tepe Yahya: Plan of Period IVC.2 architecture (from Beale and Carter (1983: fig. 3)).

FIGURE 8.1

Tepe Yahya and Tepe Gaz Tavila-R37: large mammal remains as a percent of total bone counts (a) and of total bone weights (b) summarized by temporal unit

ns = not screened, sc = screened, NS = number of specimens

FIGURE 8.1

LARGE MAMMAL

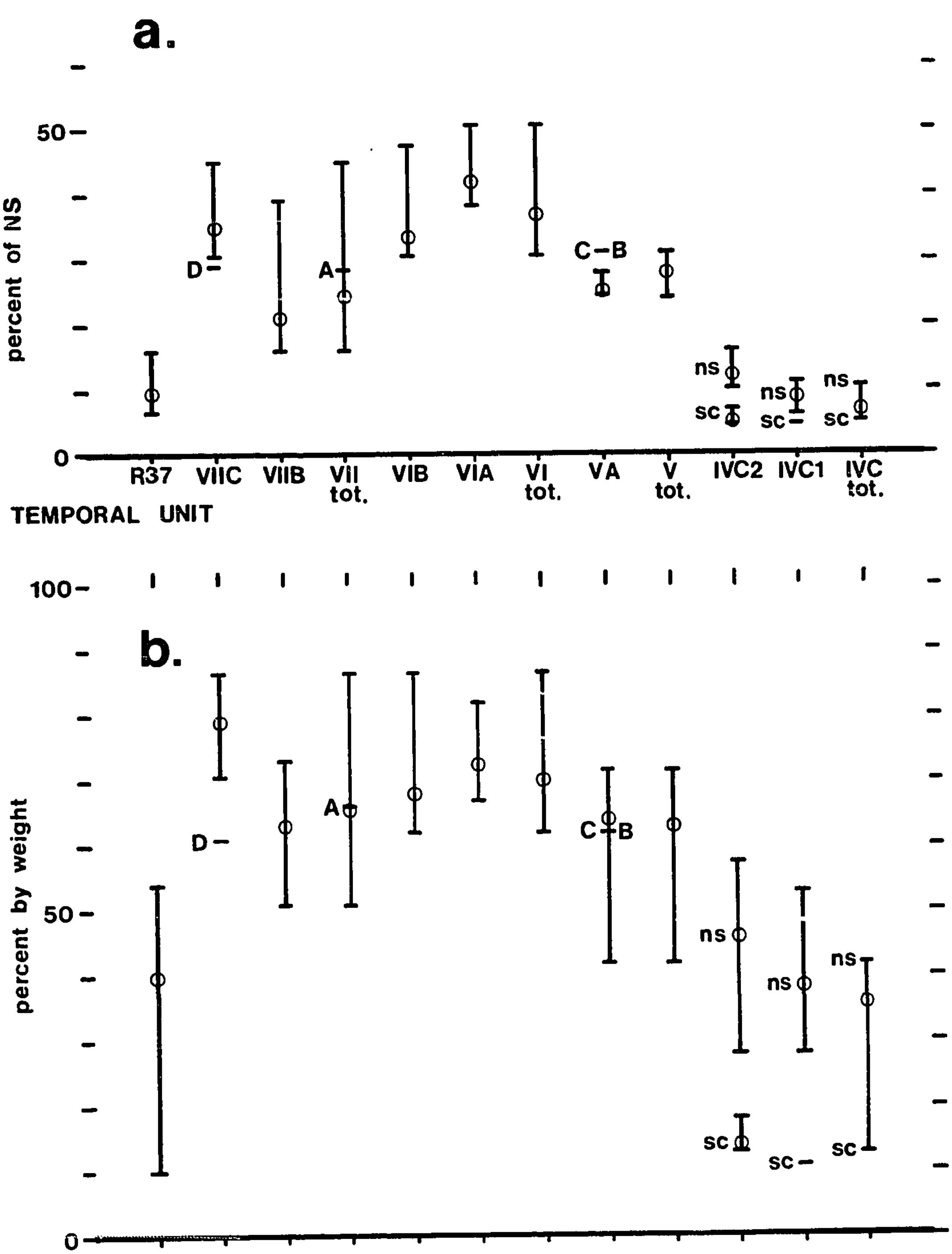


FIGURE 8.2

Tepe Yahya and Tepe Gaz Tavila-R37: large mammal remains as a percent of total bone counts (a) and of total bone weights (b) plotted by context type for major temporal divisions

ns = not screened, sc = screened, NS = number of specimens R = rubble, W = walls, OI = interior occupation, OO = exterior occupation, OFI = interior occupation and fill, OFO = exterior occupation and fill, M = midden, FI = upper fill within or associated with walls, FO = upper fill not associated with walls, PL = platforming, Mx = mixed or other, TOT = total; see Chapter 6; context labels apply to both graphs

FIGURE 8.2

LARGE MAMMAL

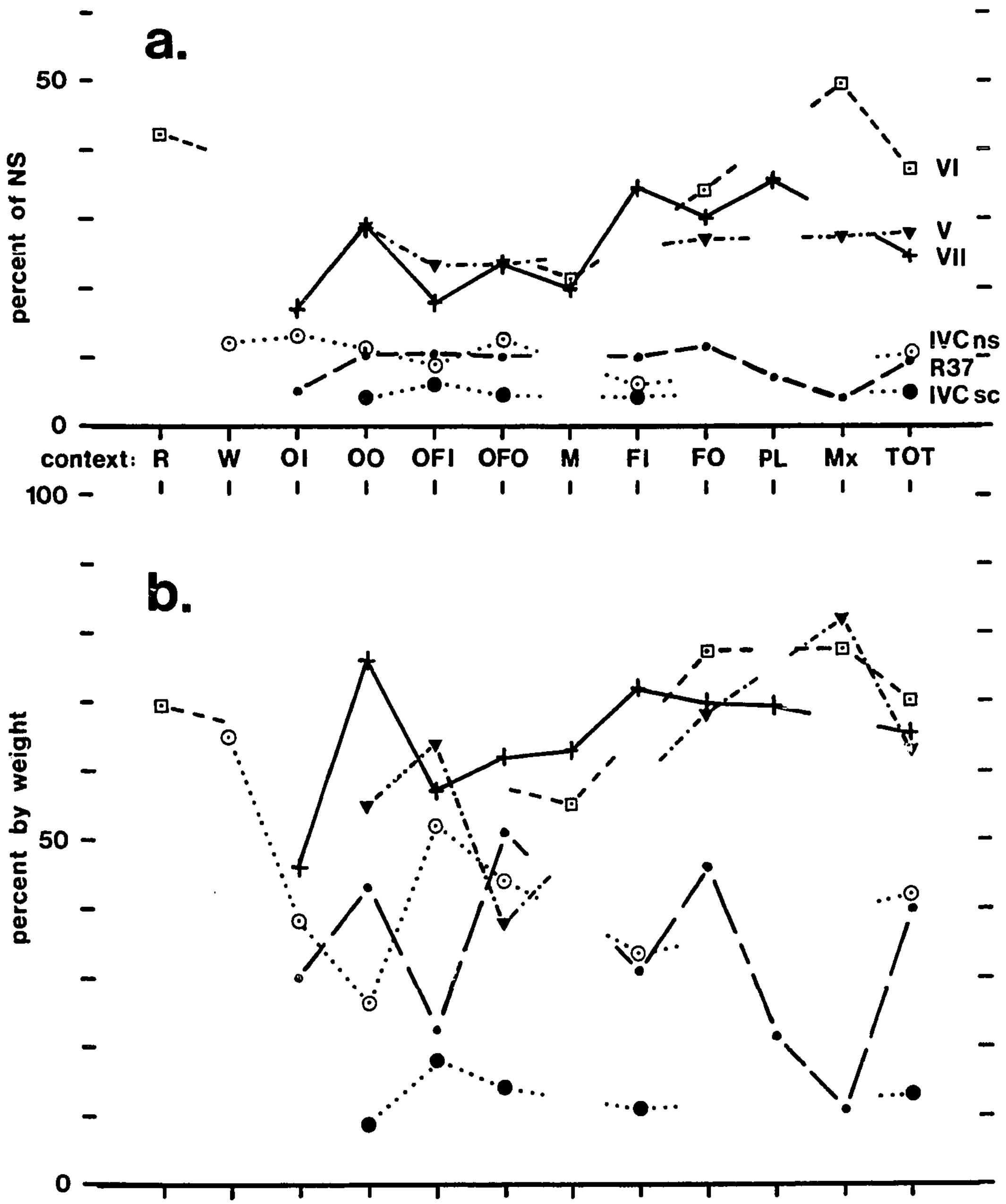
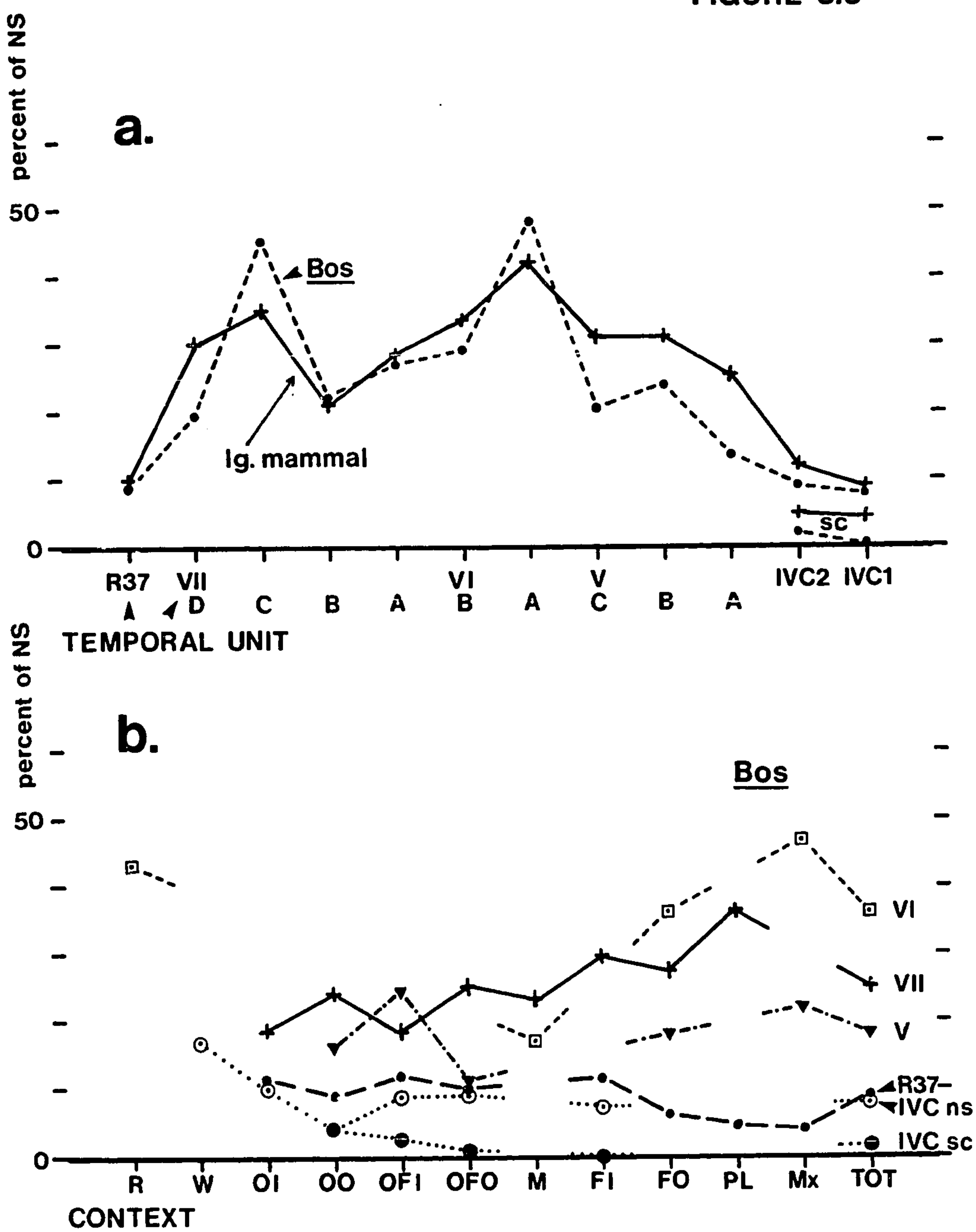


FIGURE 8.3

Tepe Yahya and Tepe Gaz Tavila-R37: comparison of large mammal and *Bos* sp. remains as percents of total bone counts summarized by temporal unit (a) and *Bos* sp. remains as a percent of standardized bone counts plotted by context type for major temporal divisions (b)

See Figure 8.2 for abbreviations

FIGURE 8.3



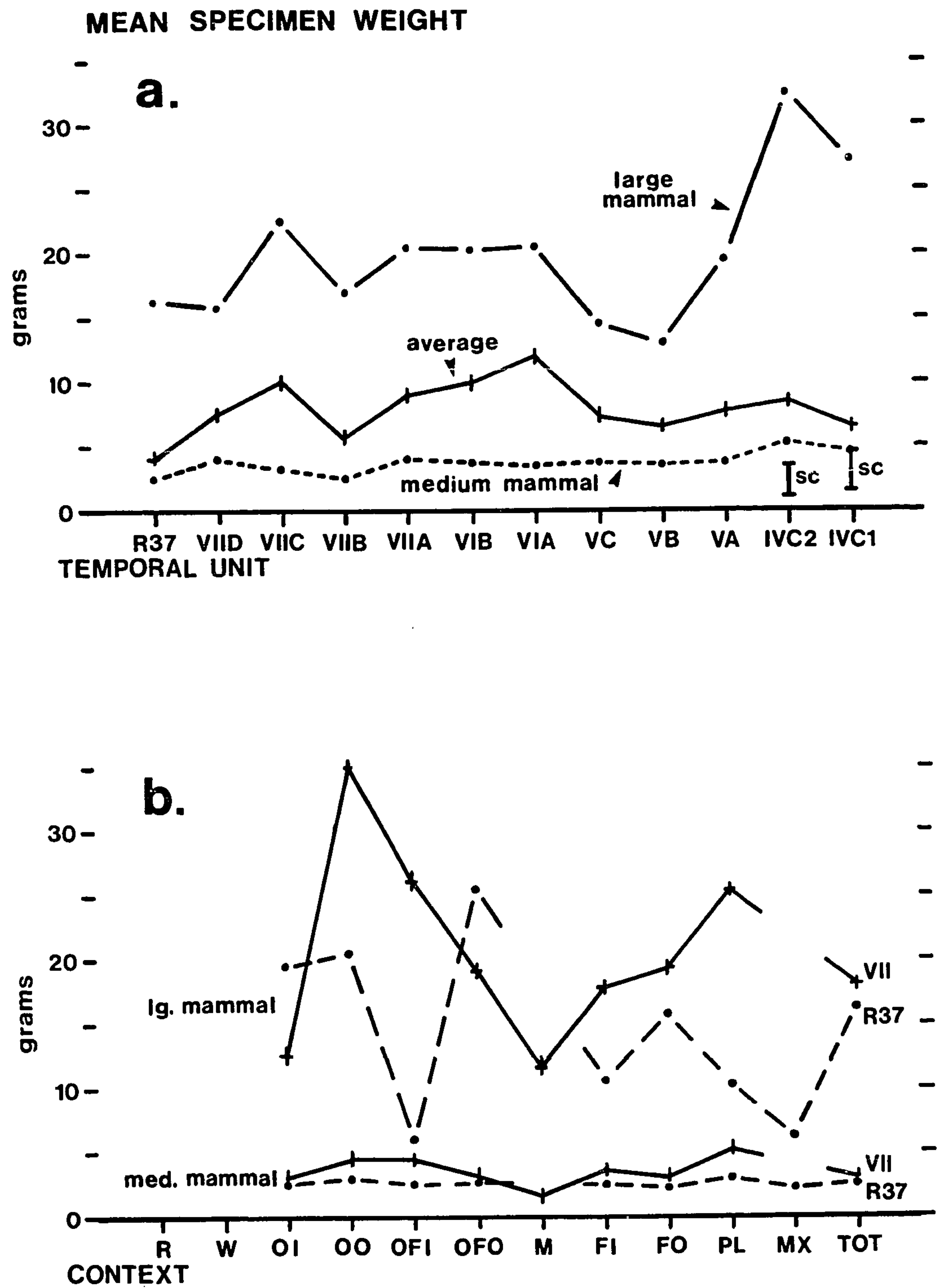
percent of NS
a.
50
0
Bos
lg. mammal
sc
R37
VII
D
C
B
A
VI
B
A
V
C
B
A
IVC2
IVC1
TEMPORAL UNIT
percent of NS
b.
50
0
Bos
VI
VII
V
R37–
IVC ns
IVC sc
R
W
OI
OO
OFI
OFO
M
FI
FO
PL
Mx
TOT
CONTEXT

FIGURE 8.4

Average specimen weights plotted by temporal unit (a)
and by context type for Tepe Gaz Tavila-R37
and Tepe Yahya period VII (b)

See Figure 8.2 for abbreviations

FIGURE 8.4



MEAN SPECIMEN WEIGHT
a.
30
20
10
0
grams
large mammal
average
medium mammal
sc
sc
R37 VIID VIIC VIIB VIIA VIB VIA VC VB VA IVC2 IVC1
TEMPORAL UNIT
b.
30
20
10
0
grams
lg. mammal
med. mammal
VII
R37
VII
R37
R W OI OO OFI OFO M FI FO PL MX TOT
CONTEXT

FIGURE 8.5

Average specimen weights plotted by context type for Tepe Yahya periods VI, V, and IVC

See Figure 8.2 for abbreviations;
IVC refers to not screened material only

FIGURE 8.5

MEAN SPECIMEN WEIGHT

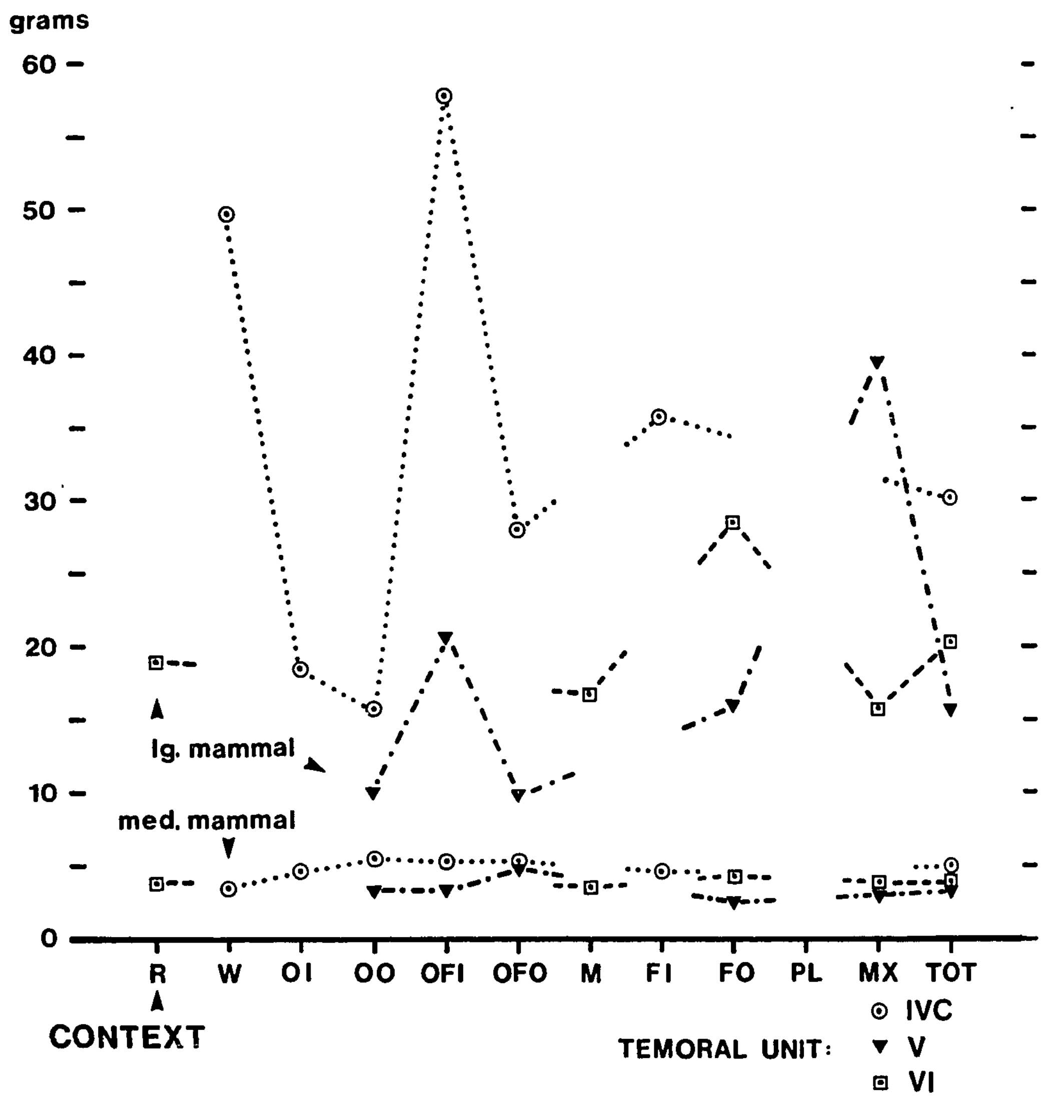
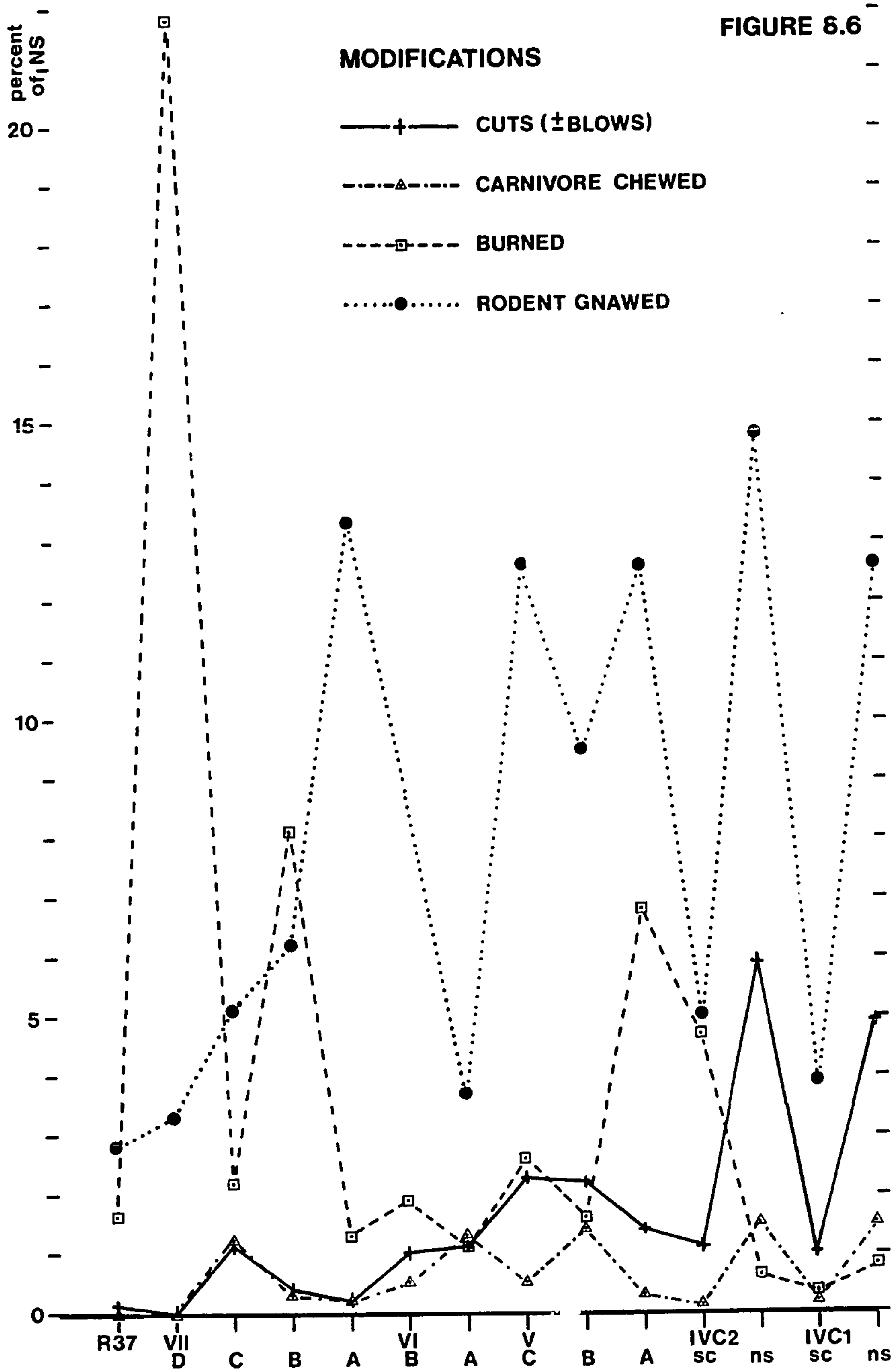


FIGURE 8.6

Bone modifications as a percent of total bone counts, plotted by temporal unit for Tepe Gaz Tavila-R37 and Tepe Yahya.

ns = not screened, sc = screened, NS = number of specimens

FIGURE 8.6

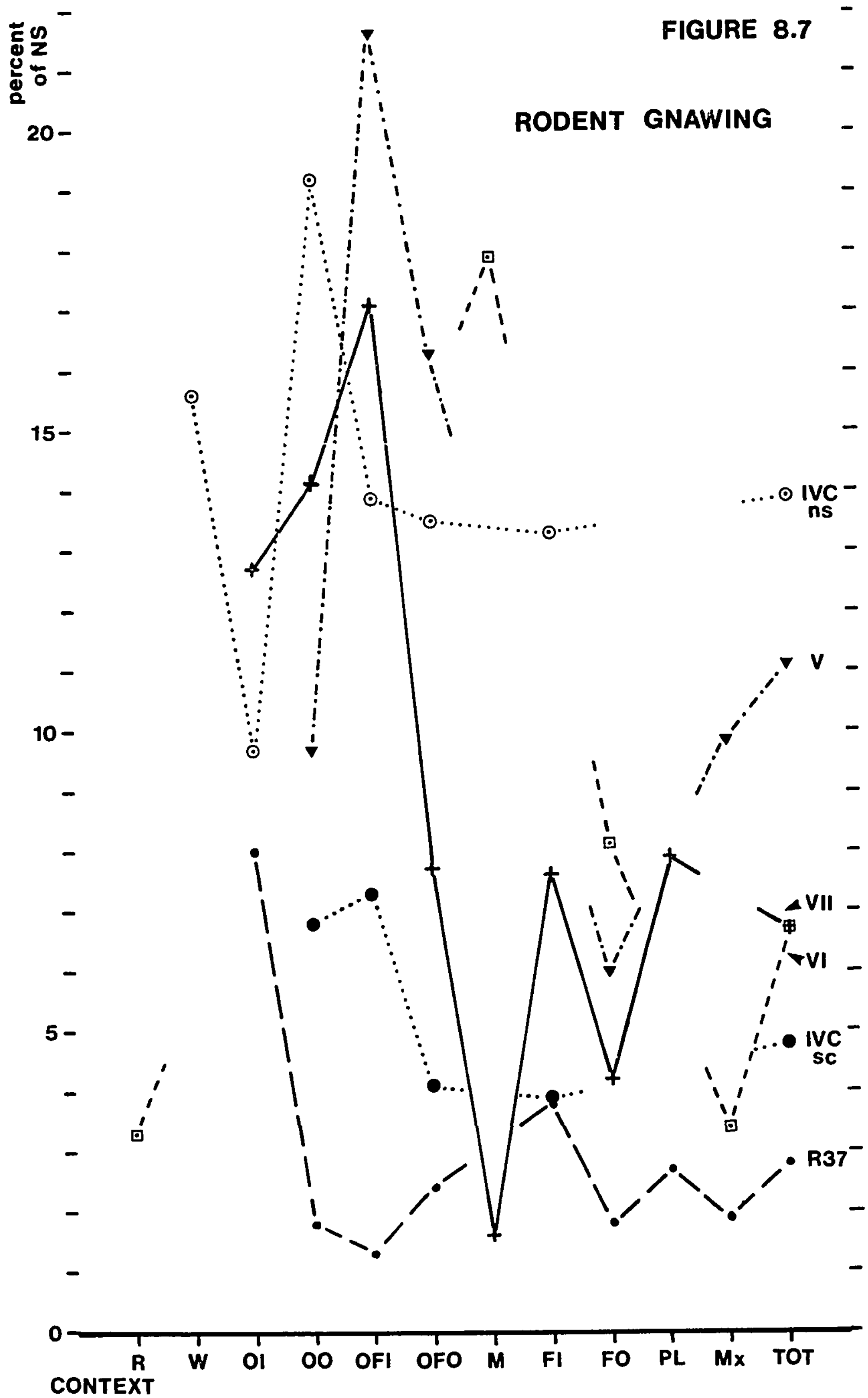


MODIFICATIONS
CUTS (±BLOWS)
CARNIVORE CHEWED
BURNED
RODENT GNAWED
percent of NS
20
15
10
5
0
R37
VII D
C
B
A
VI B
A
V C
B
A
IVC2 sc
ns
IVC1 sc
ns

FIGURE 8.7

Rodent gnawing as a percent of total bone counts,
plotted by context type for Tepe Gaz Tavila-R37 and Tepe Yahya

See Figure 8.2 for abbreviations


FIGURE 8.7
RODENT GNAWING
percent of NS
20
15
10
5
0
IVC ns
V
VII
VI
IVC sc
R37
R
W
OI
OO
OFI
OFO
M
FI
FO
PL
Mx
TOT
CONTEXT

TABLES

TABLE 2.1

Chronology for the Occupation of Tepe Yahya and Tepe Gaz Tavila-R37 (after Prickett 1986a)

Period	C-14 (5730) bc/ad	Calibrated BC/AD
IA	ad 100 - 225	AD 200 - 250
gap	---	---
IB	200 - 0 bc	175 BC - AD 100
gap	---	---
IIA	440 - 275 bc	400 - 225 BC
IIB	475 - 440 bc	475 - 400 BC
gap	---	---
III	700 - 525 bc	700 - 580 BC
gap	---	---
IVA	1700 - 1400 bc	1900 - 1550 BC
IVB	2400 - 1700 bc	2850 - 1900 BC
gap	---	---
IVC	2850 - 2750 bc	3400 - 3300 BC
gap	---	---
VA	3600 - 3300 bc	4200 - 3900 BC
VB	3700 - 3600 bc	4300 - 4200 BC
VC/VIA	3800 - 3700 bc	4500 - 4300 BC
VIB	3900 - 3800 bc	4600 - 4500 BC
VIIA	4000 - 3900 bc	4700 - 4600 BC
VIIB	4200 - 4000 bc	5000 - 4700 BC
VIIC	4500 - 4200 bc	5200 - 5000 BC
VIID	4900 - 4500 bc	5600 - 5200 BC
R37	5200 - 4700 bc	5800 - 5400 BC

TABLE 2.2

Wild mammalian taxa (except Chiroptera) likely to be found today in the Daulatabad and Soghun valleys and surrounding highland areas based on modern distributions.

Taxon	common name	habitat
Insectivora		
Hemiechinus auritus (Gmelin, 1770)	long-eared hedgehog	arid/semi-arid hills and plains
Paraechinus hypomelas (Brandt, 1836)	Brandt's hedgehog	gravel slopes
Crocidura zarudnyi Ognev, 1928	shrew	areas of denser vegetation
Lagomorpha		
Ochotona rufescens (Gray, 1842)	rufescent pika	mountain steppe forest
Lepus capensis Linnaeus, 1758	cape hare	general
Rodentia		
Calomyscus bailwardi Thomas, 1905	long-tailed hamster	mountain steppe
Cricetulus migratorius (Pallas, 1773)	gray hamster	mountain steppe
Gerbillus nanus Blanford, 1875	Baluchistan gerbil	rocky areas or clay flats with scrub
Gerbillus cheesmani Thomas, 1919	Cheesman's gerbil	semi-desert - dunes or mud flats
Tatera indica (Hardwicke, 1807)	Indian gerbil	alluvium, cultivated areas
Meriones persicus (Blanford, 1875)	Persian jird	mountainous regions
Meriones hurrianae (Jerdon, 1867)	Indian desert jird	alluvium
Meriones libycus Lichtenstein, 1823	Libyan jird	broad valleys at lower altitudes
Meriones crassus Sundevall, 1842	Sundevall's jird	barren stony plains
Rhombomys opimus (Lichtenstein, 1823)	great jird	broad valleys at lower altitudes
Rattus rattus (Linnaeus, 1758)	black rat	commensal
Mus musculus Linnaeus, 1758	house mouse	field and commensal
Acomys cahirinus (Desmarest, 1819)	spiny mouse	barren, rocky regions

Taxon	common name	habitat
Nesokia indica (Gray, 1830)	bandicoot rat	damp soil
Dryomys nitedula (Pallas, 1779)	forest dormouse	steppic mountain regions
Jaculus blanfordi (Murray, 1884)	greater 3-toed jerboa	barren arid plains
Allactaga elater (Lichtenstein, 1825)	small 5-toed jerboa	upland desert slopes or flats
Hystrix indica Kerr, 1792	crested porcupine	general
Carnivora		
Canis lupus Linnaeus, 1758	wolf	general
Canis aureus Linnaeus, 1758	jackal	general
Vulpes vulpes (Linnaeus, 1758)	red fox	general
Vulpes rueppelli (Schinz, 1825)	sand fox	deserts
Vulpes cana Blanford, 1877	Blanford's fox	mountain steppe
Selenarctos thibetanus (G. Cuvier, 1823)	Asiatic desert bear	arid sub-tropical thorn forest
Ursus arctos Linnaeus, 1758	brown bear	high mountains
Vormela peregusna (Guldenstaedt, 1770)	marbled polecat	semi-rocky areas esp. uplands
Martes foina (Erxleben, 1777)	rock marten	mountain steppe
Herpestes auropunctatus (Hodgson, 1836)	small Indian mongoose	commensal; wooded lowlands
Herpestes edwardsi (Geoffroy, 1818)	gray Indian mongoose	arid plains
Hyaena hyaena (Linnaeus, 1758)	striped hyaena	general hills and valleys
Felis silvestris Schreber, 1777	wild cat	general
Felis chaus Guldenstaedt, 1776	jungle cat	river and swamp areas
Felis caracal Schreber, 1776	caracal	remote scrubby low-lying areas
Panthera pardus (Linnaeus, 1758)	leopard	broken hilly country
Acinonyx jubatus (Schreber, 1776)	cheetah	semi-arid plains

Taxon	common name	habitat
Perissodactyla		
Equus hemionus Pallas, 1775	Persian wild ass	semi-arid plains
Artiodactyla		
Sus scrofa Linnaeus, 1758	wild boar	river, swamp, and nearby plains
Gazella subgutturosa (Guldenstaedt, 1780)	goitered gazelle	shrubby plains/ broad valleys
Gazella bennetti (Sykes, 1831)	jeber/chinkara	sub-desert plains/ semi-arid valleys
Capra aegagrus Erxleben, 1777	Persian wild goat	remote steep hillsides
Ovis orientalis Gmelin, 1774	wild sheep	lower hills and valley slopes

Source: from Meadow (1986: table 3.3) based on distributions described by Misonne (1959), Lay (1967), and Corbet (1978).

TABLE 4.1
Genera and species of vertebrates
identified from archaeological deposits of
Tepe Yahya, south side, periods VII-IVC and Tepe Gaz Tavila-R37

REPTILE
Testudo graeca Linnaeus, 1758 :: tortoise

BIRDS
(?)Ardea cinerea Linnaeus, 1758 :: grey heron
(?)Cygnus olor (Gmelin, 1789) :: mute swan
Anas platyrhynchos Linnaeus, 1758 :: mallard
(?)Aytha ferina (Linnaeus, 1758) :: pochard
(?)Gypaetus barbatus (Linnaeus, 1758) :: lamergeier
Aquila chrysaetos (Linnaeus, 1758) :: golden eagle
Hieraaetus fasciatus (Vieillot, 1822) :: Bonelli's eagle
**Gallus gallus (Linnaeus, 1758) (domestic) :: domestic chicken
(?)Alectoris chukar (J.E. Gray, 1830) :: chukar
Francolinus francolinus (Linnaeus, 1766) :: black francolin
Chlamydotis undulata (Jacquin, 1784) :: houbara
Columba livia Gmelin, 1789 :: rock dove
(?)genus Streptopelia Bonaparte, 1855 :: dove
Bubo bubo (Linnaeus, 1758) :: eagle owl
Corvus corax Linnaeus, 1758 :: raven

MAMMALS
Lepus capensis Linnaeus, 1758 :: cape hare
Hystrix indica Kerr, 1792 :: porcupine
genus Canis Linnaeus, 1758 :: wolf/dog/jackal
    Canis familiaris Linnaeus, 1758 :: dog
genus Vulpes Frisch, 1775 :: fox
    Vulpes vulpes (Linnaeus, 1758) :: red fox
(?)Selenarctos thibetanus (Cuvier, 1823) :: Asiatic black bear
Herpestes auropunctatus (Hodgson, 1836) :: small Indian mongoose
Felis (?)chaus Guldenstaedt, 1776 :: jungle cat
Panthera leo (Linnaeus, 1758) :: Asiatic lion
genus Equus Linnaeus, 1758 :: half-ass/ass/horse/hybirds
    Equus hemionus Pallas, 1775 :: half-ass or Asiatic ass
Sus scrofa Linnaeus, 1758 :: boar/domestic pig
**genus Camelus Linnaeus, 1758 :: camel
genus Bos Linnaeus, 1758 :: cattle
    Bos indicus Linnaeus, 1758 :: domestic zebu cattle
    Bos taurus Linnaeus, 1758 :: domestic taurine cattle
genus Gazella Blainville, 1816 :: gazelle
genus Capra Linnaeus, 1758 :: goat
    Capra hircus Linnaeus, 1758 :: domestic goat
genus Ovis Linnaeus, 1758 :: sheep
    Ovis aries Linnaeus, 1758 :: domestic sheep

Notes: (?) = identification not certain
** = probably intrusive, coming from later deposits

TABLE 4.2

Testudo graeca cf. *zarudnyi* remains from Tepe Yahya

Phase	locus-bone	#	body part	size
VIIE	0160-0031	1	pleural	E-A
VIIB	0197-0024	1	pleural	GT -A
	0199-0067	1	peripheral	E-B
	0207-0037	1	nuchal (proneural)	GT -A
	0212-0017	1	hypoplastron	GT -A
	0881-0013	1	peripheral	E-A
	0877-0012	1	xiphiplastron + part hypoplastron	GTE-A
	2302-0006	1	3 peripherals	E-A
	2304-0043	1	pygal	GTE-A
	2307-0067	1	? carapace	?
	0068	1	? carapace/plastron	?
	2111-0043	1	entoplastron + 2 epiplastra	GT -B
	0044	2	hypoplastron	LT -A
	2115-0065	1	peripheral	LT -A
VIIB-A	1937-0059	1*	epiplastron	LT -B
	0060	1*	? plastron	LT -B
	1938-0049	1	pleural	E-A
	1939-0051	1	3 pleurals (shaped as a vessel?)	LTE-A
VIIA	0161-0077	1	femur shaft	GTE-A
	0154	3*	3 peripherals	E-A
	0155	1*	hypoplastron	E-A
	0156	1*	2 pleurals	E-A
	0157	8*	neurals + pleurals (same animal)	E-A
	0158	3*	? plastron	E-A
	0159	?*	? carapace/plastron fragments	E-A
VIIA-VIB	1933-0119	3	? plastron	E-A
VIB	0159-0350	1	pleural	E-A
	0353	1	peripheral	LT -B
	0171-0085	1	peripheral	GT -A
	0086	1	peripheral	E-A
	0794-0011	2	hypoplastron	GTE-A
	1930-0134	1*	peripheral	LTE-A
	0135	1*	2 peripherals	LTE-A
	1932-0119	1	hypoplastron	GT -A
VIA	1915-0154	1	peripheral	E-A
VC	0314-0012	1	peripheral	E-B
VA	1902-0015	1	6 peripherals	LT -A
VA-IVC	0325-0022	1	pleural	LTE-B

IVC.2	3704-0114	1	proximal humerus (fused)	GT -A
	3728-0016	1	peripheral	LTE-A
	3736-0037	1	hypoplastron	GT -A
	3745-0039	1	pleural (burned black)	E-A
	3749-0026	1	pleural	E-B
	3764-0114	1	pleural	LTE-B
IVC.1	0296-0027	1*	suprapygal + 2 neurals	GTE-A
	0028	1*	pleural	GTE-A
	0029	2*	2 pleurals	GTE-A
	0030	1*	pleural	GTE-A
	0377-0004	1	2 peripherals	E-A
	0534-0014	1	peripheral	LTE-A
	0550-0023	1	pygal	E-B
	3724-0097	1	neural	LT -B

Key: locus-bone = locus code and specimen identification number
= number of specimens; * = probably from same individual as others marked with * in same locus
size in relation to MCZ 53819 (A) and MCZ 53829 (B):
E = approximately equal in size to
GT = greater than (if GT-B, implies LT-A)
LT = less than (if LT-A, implies GT-B)
GTE = greater than or equal to
LTE = less than or equal to

Table 4.2-2

TABLE 4.3
Birds identified from Tepe Yahya, south side, periods VII-IVC

	VII	VI	VC	VB	VA	IVC .2	IVC .1	part	tool	seas	habt
(?)*Ardea cinerea* (grey heron):	--1--		-	-	-	-	-	w	-	m	w
(?)*Cygnus olor* (mute swan):	-	-	-	-	-	1	-	w	+	m	w
Anas platyrhynchos (mallard):	-	-	-	-	-	-	1	b	-	m	w
(?)*Aytha ferina* (pochard):	-	-	-	-	-	-	1	w	-	m	w
Aquila chrysaetos (golden eagle):	-	-	-	-	-	-	1	w	-	r	r
A.c. or *Gypaetus barbatus* (lamergeier):	1	-	-	-	-	-	-	w	+	r	r
Hieraaetus fasciatus (Bonelli's eagle):	-	-	-	-	-	1	-	w	-	r	r
Gallus gallus (domestic) (domestic chicken):	-	(1)	-	-	-	-	-	l	-	r	d
(?)*Alectoris chukar* (chukar):	1	-	-	-	-	-	-	l	-	r	v
Francolinus francolinus (black francolin):	-	-	1	-	1	-	-	w/l	-	r	v
Alectoris chukar OR *Francolinus* sp.:	2-1--		-	1	-	6	2	wbl	-	r	v
Chlamydotis undulata (houbara):	-	-	-	-	-	-	1	l	-	s	v
Columba livia (rock dove):	-	-	-	-	-	-	1	w	-	r	r
(?)*Streptopelia* sp. (dove):	-	-	-	-	-	1	-	b	-	r/s	v
Bubo bubo (eagle owl):	1	0.5	-	-	-	-1.5-		w	+	r	r
Corvus corax (raven):	-	1	-	-	-	-	-	w	-	r	v

Notes: Counts apportioned between temporal divisions indicate bones from mixed or uncertain loci. Count in ( ) indicates probably intrusive. "part" = part of body (w = wing, b = breast, l = leg); "tool" = evidence of possible use as tool (+ = present, - = absent); "seas" = season of year likely to be in Soghun valley (r = resident year-round, m = migratory stop on fly-over in spring or fall, s = summer); "habt" = required habitat (r = rocky ridges, w = water, v = valley floor, d = domestic).

TABLE 4.4
Mammals identified from Tepe Yahya, south side, periods VII-IVC and from Tepe Gaz Tavila-R37

	R37	VII		VI		VC		VB		VA	IVC .2		IVC .1
Lagomorpha													
Lepus capensis (cape hare)	3	-		-		1		-		-	-		-
Rodentia													
Hystrix indica (porcupine)	-	-		1		8		1		-	-		-
Carnivora													
Canis sp./*familiaris* (wolf/dog)	1	1		1		-		3		2	1		-
Vulpes sp./*vulpes* (fox/red fox)	2	-		-		1		-		-	-		1
(?)*Selenarctos thibetanus* (black bear)	-	-		-		-		-		-	1		-
Herpestes auropunctatus (mongoose)	-	-		-		-		-		-	1		-
Felis (?)*chaus* (jungle cat)	-	-		1		-		-		-	-		-
Panthera leo (lion)	-	-		-		-		-		-	1		-
Perissodactyla													
Equus hemionus (half-ass)	-	5	-6-	16		2		1		2	-		1
Artiodactyla													
Sus srofa (pig/boar)	1	9	-1-	7	-2-	3	-1-	2		2	2		3
Camelus sp. (camel)	-	(1)		-		-		-		-	-		-
Bos sp. (cattle)	++	++		++		++		++		++	++		++
Gazella sp. (gazelle)	11	31	-2-	15		6		5	-1*-	5	17	-2-	11
Ovis sp./*aries* (sheep)	++	++		++		++		++		++	++		++
Capra sp./*hircus* (goat)	++	++		++		++		++		++	++		++

Note and key: values between columns indicate material from mixed or uncertain loci;
* = specimen from VC-A locus;
++ = for counts, see discussions of individual taxa;
(1) = camel bone probably intrusive.

TABLE 4.5
Equus bones from Tepe Yahya, south side, periods VII-IVC: skeletal parts represented

Skeletal part:	R37	VII	/	VI	/	VC	/	VB	VA	IVC .2	IVC .1
Skull	-	-	-	1y	-	-	-	-	-	-	1
Maxillary teeth	-	-	-	1	-	1	-	-	1	-	-
Mandibular teeth	-	-	2d*	3*	-	-	-	-	-	-	-
Ribs	-	-	1	-	-	-	-	1	-	-	-
px. Radius	-	1f	-	-	-	-	-	-	-	-	-
ds. Radius	-	-	-	1f	-	-	-	-	-	-	-
px. Metacarpal III	-	-	-	1	-	-	-	-	-	-	-
sh. Femur	-	-	-	1	-	-	-	-	-	-	-
ds. Tibia	-	2f	-	-	-	-	-	-	-	-	-
Central tarsal	-	-	-	1	-	-	-	-	-	-	-
px. Metatarsal III	-	-	1*	-	-	-	-	-	-	-	-
px. Metatarsal IV	-	-	1*	-	-	1	-	-	-	-	-
ds. Metatarsal III	-	-	-	2f	-	-	-	-	-	-	-
Phalanx 1	-	1f	1	2f,2?	-	-	-	-	1f	-	-
Phalanx 2	-	1f	-	1f	-	-	-	-	-	-	-
Total = 33	0	5	6	16	0	2	0	1	2	0	1

Key: y = young, f = epiphysis fused, u = epiphysis unfused, ? = state of fusion not determinable.
px. = proximal, sh. = shaft, ds. = distal.
* = specimen articulates with another.

TABLE 4.6

Measurements (in mm.) of *Equus* upper cheekteeth from Tepe Yahya

Upper cheekteeth	ID-# Tooth: phase:	773-6 P4/ or M1/ Yahya VIA	1372-6 (?)M3/ Yahya VC	1320-9 P4/ or M1/ Yahya VA.1
1. Length (vdD-20:25-30)		27.0	--	--
2. Breadth (vdD-20:25-30)		--	--	--
2/1 100 x B/L		--	--	--
3. Crown Height		(47.5)	--	GT 70
4. Occlusal Length (T-1:1)		27.0	--	--
5. Occlusal Breadth (T-1:4)		--	--	(22.0)
5/4 100 x occ.B/occ.L		--	--	--
3/5 100 x cr.H/occ.B		--	--	GT (318%)
6. Protocone Length (T-1:9)		11.0	13.5	(13.0)
6/4 100 x PL/occ.L		40.7%	--	--
7. L. mesial ectoloph (T-1:2)		--	--	(11.0)
8. L. distal ectoloph (T-1:3)		--	--	--
9. buccal L. prefos. (T-1:5)		12.8	--	12.9
10. buccal L. postfos. (T-1:6)		10.8	--	--
11. lingual L. prefos. (T-1:7)		7.1	--	9.1
12. lingual L. postfos. (T-1:8)		6.7	--	--
13. Breadth prefossette		10.2	--	9.5
14. Breadth postfossette		8.9	--	--
15. Length hypoglyph (T-1:12)		4.4	--	--

Notes: vdD-#:# = see von den Driesch (1976)-page #: measurement #
T-#:# = see Turnbull (1986)-figure #: measurement #
GT = greater than; L = Length; B = Breadth
values in parentheses are estimated

TABLE 4.7

Measurements (in mm.) of *Equus* lower cheekteeth from Tepe Yahya

Lower cheekteeth ID -#	784-4	1930 -29	1932 -53	1934 -13	1934 -12
Tooth:	P/3 or P/4	P/4	M/1	D/2	D/3
Yahya phase:	VIB.2	VIB.2	VIB.2	VIB.2-VIIA	
1. Length (vdD-53:9-14)	--	27.0	(26.0)	--	30.2
2. Breadth (vdD-53:9-14)	--	(20.0)	(19.5)	--	15.1
2/1 100 x B/L	--	(74.1%)	(75.0%)	--	50.0%
3. Crown Height	--	(93.0)	(90.0)	--	16.8
4. Occlusal Length (T-2:1)	--	26.4	--	--	30.2
5. Occlusal Breadth	--	(15.5)	--	(13.0)	12.9
5/4 100 x occ.B/occ.L	--	(58.7%)	--	--	42.7%
3/5 100 x cr.H/occ. B	--	(600%)	--	--	130.2%
6. B metastylid-hypoconid (T-2:3)	--	15.2	--	--	12.5
7. B metaconid-protoconid (T-2:2)	--	(15.5)	--	--	12.9
8. Breadth between sulci (T-2:9)	--	3.8	2.5	--	3.0
8/7 100 x Bbs/Bmcd-pcd	--	(24.5%)	--	--	23.3%
9. L double knot (mcd-msd)(T-2:4)	--	17.5	15.2	--	17.3
9/4 100 x Ldk/occ.L	--	66.3%	--	--	57.3%
10. Length metaconid (T-2:5)	--	8.8	7.6	--	8.5
10/9 100 x Lmcd/Ldk	--	50.3%	50.0%	--	49.1%
11. Breadth metaconid (T-2:12)	--	(6.7)	--	--	5.7
12. Length metastylid (T-2:6)	--	8.1	7.1	--	8.8
13. Breadth metastylid (T-2:13)	--	6.9	5.1	--	5.1
14. Length protoconid (T-2:7)	--	11.1	11.2	--	12.3
15. Length hypoconid (T-2:8)	12.2	14.0	--	17.0	14.5
16. Length preflexid (T-2:11)	--	9.5	7.9	--	10.0
17. Length postflexid (T-2:14)	11.6	13.4	11.9	(15.7)	14.5
18. Length paralophid (T-2:10)	--	--	(9.0)	--	10.0

Notes: vdD-#:# = see von den Driesch (1976)-page #: measurement #
T-#:# = see Turnbull (1986)-figure #: measurement #
values in parentheses are estimated

TABLE 4.8
Measurements (in mm.) of *Equus* post-cranial bones from Tepe Yahya

Radius (distal)	1346-1 Yahya VIA
SD	(35.0)
Bd	62.4
BFd (E-38:8)	50.0
Dd	35.8
DFd (E-38:9)	30.0
Brc (E-38;10)	21.1
Buc (E-38:11)	12.7

Tibia (distal)	877-9 VIIB.6-5	1935-25 VIIB.2-VIIA
Bd	60.9	(59.0)
Dd (parallel)	40.0	39.8
Dd (greatest)	41.8	41.7

Metacarpal III (proximal)	720-6 Yahya VIA
Dp	(30.5)
DFp (E-39:6)	(28.0)
E-39:8	12.0
E-39:8'	9.0

Metatarsal III (distal)	1923-21 VIB.2-1	1918-130 VIA
DD	19.8	21.2
Bd	(37.5)	(39.1)
s.a.Bd (E-39:10)	36.8	39.1
BFd (E-39:11)	(37.5)	(38.5)
Dd (E-39:12)	(27.6)	(30.5)
E-39:14	25.0	(28.0)
E-39:13	22.2	24.6

Metatarsal III (proximal)	1931-35 Yahya VIIA-VIB.2
E-39:9	5.5

TABLE 4.8 (continued)

Phalanx 1

Yahya	1936-38 VIIB.2-A	1932-35 VIB.2	717-10 VIB.2-1	1918-131 VIA	1906-2 VA.1
GL (E-40:1)	--	79.0	--	--	76.7
Bp (E-40:4)	--	44.4	--	--	43.6
BFp	--	41.3	--	--	--
Dp (E-40:5)	(29.0)	32.8	--	(31.0)	--
SD (E-40:3)	--	26.7	--	--	27.5
Bd (E-40:6)	--	37.5	--	--	36.2
BFd (E-40:14)	--	36.2	--	--	36.0
Dd	--	20.3	20.0	--	20.8
E-40:7	--	50.7	--	--	(45.5)
E-40:8	--	45.5	--	--	--
physiologic L	--	70.0	--	--	--
E-40:2	--	72.1	--	--	--
E-40:9	--	70.2	--	--	--
E-40:10	--	60.2	--	--	--
E-40:11	--	59.8	--	--	57.0
E-40:12	--	11.7	--	--	--
E-40:13	--	11.3	--	--	13.0
position	??	anterior	??	??	posterior

Phalanx 2

Yahya	1936-41 VIIB.2-A	802-12 VIA
GL (E-41:1)	(41.6)	40.5
Bp (E-41:4)	(41.5)	43.0
BFp	(39.0)	40.0
Dp (E-41:5)	(26.1)	26.5
DFp	--	--
SD (E-41:3)	35.0	37.0
Bd (E-41:6)	38.9	41.1
Dd	23.0	--
E-41:2	32.1	--
posterior L	--	--
position	?anterior	?anterior

Notes: E-#:# = see Eisenmann (1986)-figure #: measurement #;
values in parentheses are estimated.
for notes on how dimensions were taken, see Meadow (1986: 283-284).

TABLE 4.9

Sus scrofa bones from Tepe Yahya, south side, periods VII-IVC and from Tepe Gaz Tavila-R37: skeletal parts represented

Skeletal part:	R37	VII	/	VI	/	VC	/	VB	VA	IVC .2	IVC .1
Skull	-	-	-	-	-	-	-	-	1y	-	-
Maxillary	-	-	-	-	-	-	-	-	-	-	1y
Teeth	/i	-	M	C/	-	-	-	/i	-	P/M	M/1
Axis	-	-	-	-	-	-	-	-	-	1u	-
sh. Humerus	-	1	-	-	-	-	-	-	-	-	-
px. Radius	-	1f	-	1f	-	1f	-	-	-	-	-
sh. Radius	-	1	-	-	-	-	-	-	-	-	-
px. Ulna	-	2?	-	1?	-	2?	-	-	-	-	-
sh. Ulna	-	-	-	-	2	-	-	-	-	-	-
ds. Ulna	-	1u	-	-	-	-	-	-	-	-	-
Pelvis/Acetabulum	-	-	-	1f	-	-	-	1f	-	-	-
sh. Tibia	-	1	-	-	-	-	1	-	1	-	-
Astragalus	-	-	-	2	-	-	-	-	-	-	-
Calcaneum	-	1u	-	-	-	-	-	-	-	-	1u
px. Metatarsal V	-	-	-	1	-	-	-	-	-	-	-
ds. Metapod. II/V	-	1f	-	-	-	-	-	-	-	-	-
Total = 33	1	9	1	7	2	3	1	2	2	2	3

Key: teeth: /i = lower milk incisor, M = permanent molar fragment, C/ = permanent upper canine, P/M = permanent cheektooth fragment, M/1 = permanent lower first molar; all are single specimens.

y = young, f = epiphysis fused, u = epiphysis unfused, ? = state of fusion not determinable.

px. = proximal, sh. = shaft, ds. = distal. Metapod. = Metapodial.

TABLE 4.10

Measurements (in millimeters) of *Sus scrofa* bones from Tepe Yahya, south side, periods VII-IVC

ID no.	period	skeletal part		measurements (in mm)		
196-4	VIIB.2	radius		Bp = 30.3		
169-6	VIB.2	radius		Bp = 30.5	BFp = 30.0	SD = (17.2)
1935-6	VIIA/B.2	ulna	y	BPC = (18.5)	DPA = (27.5)	
169-7	VIB.2	ulna		BPC = 23.5	DPA = 39.0	
1912-12	VC	ulna	y		DPA = 28.0	
1912-13	VC	ulna	y	BPC = 20.0	DPA = 31.0	SDO = 25.0
1359-1	VB	pelvis		LAR = (26.5)	*BA = (23.3)	
159-49	VIB.2	talus		GLl = 45.3	GLm = (41.5)	Dl = 22.7
				Bp = 20.8		
159-50	VIB.2	talus		GLl = 46.8	GLm = (44.4)	Dl = 23.2
				Bp = 22.0	Bd = 25.0	
713-1	VIIB.1-6	calcaneum		GL without epiphysis = 70.0		
542-9	IVC.1	M/1		L = 19.8	B = 12.7	

Note: measurements as in von den Driesch (1976) except as noted.
Key: y = ascertained to have come from a young animal even though state of epiphyseal union not determinable from fragment;
*BA = breadth of acetabulum from rim of ilium to rim of pubis.

TABLE 4.11

Selected measurements (in millimeters) of bones from a modern female wild boar (*Sus scrofa lybicus*) from west of Elazig, Turkey (MCZ 51621)

Skeletal part	Dimension definition	Values Left	Right	Average
Cranium	Greatest Length			399.5*
M3/(heavy wear)	Length	35.0	37.0	36.0*
	Breadth	22.5	22.3	22.4
M/1(very	Length	17.5		
heavy wear)	Breadth	(12.0)*		
M/3(heavy wear)	Length	40.0	41.0	40.5*
	Breadth	18.5	18.3	18.4
Scapula	SLC	26.5	26.0	26.3*
	GLP	39.0	39.5	39.3
Humerus	BT	35.0	35.0	35.0
	Bd	45.8	45.7	45.8*
Radius	Bp	33.7	34.5	34.1*
	Bd	39.0	39.3	39.2*
	BFd	32.6	33.0	32.8
Ulna	BPC	25.0	25.2	25.1
	DPA	42.0	42.7	42.4*
	SDO	32.2	32.4	32.3
Metacarpal III	GL	86.5	86.8	86.7
	Bd	20.0	19.8	19.9
Metacarpal IV	GL	88.0	87.3	87.7
	Bd	18.5	18.8	18.7
Pelvis	LA	37.0	36.5	36.8
	LAR	33.5	33.3	33.4*
Femur	DC	29.8	29.8	29.8
	Bd	52.5	53.0	52.8
Tibia	Bp	53.7	53.7	53.7
	Bd	34.0	33.5	33.8*
	Dd	31.0	30.5	30.8*
Astragalus	GLl	47.4	47.5	47.5*
	GLm	43.9	43.8	43.9
Calcaneum	GL	94.5	95.0	94.8*
Metatarsal III	GL	--	96.0	--
	LeP	--	92.6	--
	Bd	18.6	19.0	18.8
Metatarsal IV	GL	--	105.0	--
	LeP	--	99.4	--
	Bd	18.9	18.5	18.7

Note: measurements as in von den Driesch (1976)
Key: * = used as the standard for calculating values in Table 4.12

TABLE 4.12

Site	Skeletal Part	Log diff.	Corrected log diff.
HF	Pelv	-.019	-.052
HF	Pelv	-.030	-.063
HF	Rad	-.048	-.081
HF	Ulna	-.069	-.103
HF	Ulna	-.072	-.105
HF	Hum	-.075	-.108
HF	Scap	-.076	-.109
HF	Talus	-.085	-.118
HF	Rad	-.086	-.119
HF	Hum	-.091	-.124
HF	Rad	-.092	-.125
HF	Pelv	-.096	-.129
HF	Scap	-.098	-.131
HF	Ulna	-.101	-.134
HF	Scap	-.104	-.137
HF	Talus	-.111	-.144
HF	M/3	-.116	-.116
HF	Hum	-.117	-.150
HF	Scap	.039	.006
HF	M/3	.113	.113
HF	Tib	.071	.038
JARMO	Pelv	-.004	-.037
JARMO	Hum	-.005	-.038
JARMO	Talus	-.006	-.039
JARMO	Pelv	-.017	-.050
JARMO	Pelv	-.017	-.050
JARMO	M3/	-.018	-.018
JARMO	M3/	-.020	-.020
JARMO	M3/	-.021	-.021
JARMO	M/3	-.022	-.022
JARMO	M3/	-.024	-.024
JARMO	M3/	-.024	-.024
JARMO	M/3	-.025	-.025
JARMO	Talus	-.027	-.060
JARMO	Talus	-.027	-.060
JARMO	Talus	-.031	-.064
JARMO	M3/	-.031	-.031
JARMO	Rad	-.034	-.067
JARMO	Rad	-.034	-.067
JARMO	M3/	-.039	-.039
JARMO	M/3	-.046	-.046
JARMO	Talus	-.048	-.081

Table 4.12-1

JARMO	Talus	-.048	-.081
JARMO	Tib	-.049	-.082
JARMO	M/3	-.051	-.051
JARMO	M3/	-.054	-.054
JARMO	M3/	-.066	-.066
JARMO	Talus	-.069	-.102
JARMO	Talus	-.069	-.102
JARMO	Hum	-.071	-.104
JARMO	Hum	-.089	-.122
JARMO	Hum	-.100	-.133
JARMO	M3/	-.101	-.101
JARMO	M3/	-.180	-.180
JARMO	M3/	-.198	-.198
JARMO	M3/	-.198	-.198
JARMO	M3/	-.232	-.232
JARMO	M3/	-.234	-.234
JARMO	M3/	-.242	-.242
JARMO	Talus	.015	-.018
JARMO	M/3	.036	.036
JARMO	Hum	.037	.004
JARMO	M3/	.051	.051
JARMO	M/3	.066	.066
JARMO	Hum	.078	.045
JARMO	M3/	.079	.079
JARMO	Scap	.109	.076
KOR	Pelv	-.024	-.024
KOR	Pelv	-.031	-.031
KOR	Pelv	-.038	-.038
KOR	Pelv	-.053	-.053
KOR	Talus	-.053	-.053
KOR	Scap	-.058	-.058
KOR	Pelv	-.060	-.060
KOR	Tib	-.067	-.067
KOR	Tib	-.067	-.067
KOR	Tib	-.067	-.067
KOR	Scap	-.068	-.068
KOR	Talus	-.069	-.069
KOR	Ulna	-.071	-.071
KOR	M3/	-.072	-.072
KOR	M3/	-.072	-.072
KOR	Tib	-.074	-.074
KOR	M/3	-.082	-.082

Table 4.12-2

KOR	Tib	-.082	-.082
KOR	Scap	-.088	-.088
KOR	Talus	-.091	-.091
KOR	Ulna	-.096	-.096
KOR	M/3	-.096	-.096
KOR	Ulna	-.096	-.096
KOR	Talus	-.097	-.097
KOR	Talus	-.097	-.097
KOR	Talus	-.097	-.097
KOR	Talus	-.097	-.097
KOR	Tib	-.098	-.098
KOR	Tib	-.098	-.098
KOR	Tib	-.098	-.098
KOR	Scap	-.098	-.098
KOR	Hum	-.099	-.099
KOR	Ulna	-.102	-.102
KOR	Hum	-.105	-.105
KOR	Hum	-.105	-.105
KOR	Tib	-.106	-.106
KOR	Pelv	-.107	-.107
KOR	Pelv	-.107	-.107
KOR	Pelv	-.107	-.107
KOR	Pelv	-.107	-.107
KOR	Scap	-.108	-.108
KOR	Talus	-.108	-.108
KOR	M3/	-.109	-.109
KOR	Ulna	-.109	-.109
KOR	M/3	-.109	-.109
KOR	Hum	-.111	-.111
KOR	Tib	-.114	-.114
KOR	Tib	-.114	-.114
KOR	Ulna	-.115	-.115
KOR	Hum	-.117	-.117
KOR	Scap	-.118	-.118
KOR	Calc	-.118	-.118
KOR	Scap	-.118	-.118
KOR	Ulna	-.122	-.122
KOR	Hum	-.123	-.123
KOR	Hum	-.123	-.123
KOR	Talus	-.126	-.126
KOR	Hum	-.129	-.129
KOR	Hum	-.129	-.129

Table 4.12-3

KOR	M/3	-.130	-.130
KOR	Talus	-.133	-.133
KOR	M/3	-.136	-.136
KOR	Ulna	-.136	-.136
KOR	Hum	-.136	-.136
KOR	Hum	-.136	-.136
KOR	Talus	-.139	-.139
KOR	Tib	-.140	-.140
KOR	Hum	-.142	-.142
KOR	Ulna	-.143	-.143
KOR	Rad	-.154	-.154
KOR	Ulna	-.158	-.158
KOR	M/3	-.176	-.176
KOR	Scap	-.177	-.177
KOR	M/3	-.184	-.184
KOR	M/3	-.236	-.236
KOR	Hum	.020	.020
KOR	Rad	.064	.064
KOR	Talus	.064	.064
KOR	Scap	.099	.099
YAH	Talus	-.006	.017
YAH	Talus	-.021	.002
YAH	Ulna	-.036	-.013
YAH	Rad	-.048	-.025
YAH	Rad	-.051	-.028
YAH	Pelv	-.099	-.076
YAH	Ulna	-.136	-.113
YAH	Ulna	-.180	-.157
YAH	Ulna	-.188	-.165
YAH	M/1	.025	.025
MR1	M/3	-.005	-.005
MR1	Scap	-.005	.057
MR1	Hum	-.008	.054
MR1	Pelv	-.011	.051
MR1	Pelv	-.021	.041
MR1	Rad	-.021	.041
MR3/4	Talus	-.022	.040
MR1	Pelv	-.031	.031
MR1	Rad	-.041	.021
MR3/4	Rad	-.050	.012
MR1	Ulna	-.051	.011
MR1	Tib	-.052	.010

Table 4.12-4

MR1	Rad	-.056	.006
MR3/4	Talus	-.067	-.005
MR1	Rad	-.070	-.008
MR1	Rad	-.070	-.008
MR1	Talus	-.091	-.029
MR1	Talus	-.098	-.036
MR1	Tib	.008	.070
MR1	M/3	.016	.016
MR1	Hum	.018	.080
MR1	M/3	.021	.083
MR1	Pelv	.046	.108
MR1	M/3	.051	.051
MR3/4	M/3	.085	.085

TABLE 4.12: Log differences for dimensions of _Sus scrofa_ bones from various sites

Notes: for standard and measurement definitions, see Table 4.11;
data are plotted here in Figures 4.3, 4.4, 4.5;
for factors used to correct log differences, see text;
sites are: Hajji Firuz (HF - Meadow 1983: table 26);
Jarmo (Stampfli 1983: table 28 and Flannery 1983: tables 6 and 7);
Korucutepe (KOR - Boessneck and von den Driesch 1975: tables 26, 37);
Tepe Yahya (YAH - here, Table 4.10);
Mehrgarh (MR - Meadow, unpublished data);
Scap = scapula SLC, Hum = humerus Bd, Rad = radius Bp or Bd, Ulna = ulna DPA, Pelv = pelvis LAR, Tib = tibia Bd or Dd, Talus = astragalus GL1, Calc = calcaneum GL, M/1 = lower 1st molar B, M3/ = upper 3rd molar L, M/3 = lower 3rd molar L.

TABLE 5.1
(following page)

Specimen counts of bones identified as *Bos* sp. arrayed by temporal unit and skeletal part

Note: x = skeletal parts included in standardized counts

TABLE 5.1

BOS sp.	R37	VAHVA 7E	7D	7C	7B	7B/ 7A	7A	7A/ 6B	6B	7A/ 6A	6B/ 6A	6A	6B/ 5C	6A/ 5C	5C	5B	5C/ 5A	5B/ 5A	5A	6/ 4C	5/ 4C	4C2	4C1	Total
Horncore	2	--	--	--	2	--	--	1	2	--	--	3	--	--	--	--	--	--	--	--	--	--	--	10
x Occiput	--	--	--	1	3	--	--	--	1	--	--	--	--	--	--	2	--	--	--	--	--	--	--	7
Skull	2	--	3	1	20	1	1	5	12	2	--	10	--	--	1	11	--	--	1	1	--	4	2	77
x Max/Teeth	--	--	--	1	4	--	3	1	2	--	--	1	--	--	--	--	--	--	--	--	--	--	--	12
Maxillary	2	--	--	1	2	--	--	--	2	--	--	2	--	--	--	1	--	--	--	--	--	--	1	11
x Man/Teeth	1	--	--	--	4	1	2	--	7	--	--	--	--	--	1	--	--	--	1	--	--	3	1	21
Mandible	5	--	--	3	13	--	9	1	8	2	--	8	1	--	4	2	--	--	14	--	--	4	--	74
x up. D8/M3	--	1	--	--	3	--	1	1	4	--	--	2	1	--	1	--	1	--	--	--	--	--	--	15
x lw. D8/M3	1	--	--	8	2	--	3	1	3	1	--	4	--	--	--	--	--	1	--	--	--	--	--	19
Teeth	5	2	4	8	29	3	23	3	29	4	--	26	--	--	5	4	3	1	20	1	--	9	10	184
Hyoid	--	--	--	1	--	--	--	--	--	--	--	1	--	--	--	1	--	--	1	--	--	--	--	4
x Atl/Axis	1	--	--	4	6	1	2	2	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17
Vertebrae	7	--	2	7	17	3	2	4	10	--	1	8	--	1	1	--	--	--	--	--	--	6	3	72
x Sacrum	2	--	--	--	2	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--	1	7
Ribs	2	--	3	4	2	3	2	--	1	--	--	--	--	--	--	1	--	--	7	--	--	5	2	32
Cst/Str	--	--	--	--	2	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3
x d.Scapula	1	--	--	2	3	1	--	1	1	--	--	3	--	--	1	--	--	--	--	--	--	2	2	17
Scapula	2	--	1	6	8	--	2	1	10	1	--	7	--	--	--	2	--	--	--	--	--	3	1	44
x p.Humerus	--	--	--	--	2	--	--	1	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	4
s.Humerus	1	--	--	--	7	1	--	2	1	--	--	5	--	--	--	--	1	--	--	--	--	6	--	24
x d.Humerus	1	--	--	2	5	1	1	2	4	--	--	5	--	--	1	1	--	--	--	--	--	4	2	29
x p.Radius	--	--	--	--	9	--	--	--	3	--	--	7	--	--	1	--	--	--	--	--	--	1	1	22
s.Radius	5	--	--	--	7	--	--	--	3	--	--	3	--	--	3	1	--	--	1	--	--	--	1	24
x d.Radius	3	--	--	--	1	1	2	--	--	--	--	2	--	--	--	--	--	--	--	--	--	2	--	11
x p.Ulna	--	--	--	--	4	--	3	--	6	--	--	4	1	--	1	--	--	--	--	--	--	--	--	19
s.Ulna	--	--	2	1	8	1	--	1	2	1	--	5	--	--	3	--	--	--	1	--	--	--	1	26
Carpal	2	2	--	8	14	1	4	1	5	2	--	11	--	--	--	1	--	--	2	--	--	2	2	57
x p.Metacarp	1	--	--	4	9	1	1	2	5	2	--	4	--	1	1	--	--	--	1	--	--	--	1	33
s.Metacarp	2	--	1	--	7	--	--	--	1	--	--	2	--	--	--	--	--	--	--	--	--	--	--	13
x d.Metacarp	2	--	1	--	2	1	3	1	7	--	1	4	--	--	--	--	--	--	--	--	--	--	--	22
x Acetabulum	3	--	--	5	10	1	3	2	2	1	--	9	--	1	--	3	--	--	5	--	--	1	3	49
Pelvis	1	--	--	1	3	--	--	--	3	--	1	4	--	--	1	--	--	--	2	--	--	2	1	19
x p.Femur	--	--	--	1	3	1	3	1	5	--	1	3	--	--	--	--	--	--	--	--	--	2	3	29
s.Femur	2	--	1	--	2	--	--	--	2	1	1	1	--	--	--	1	--	--	1	--	--	--	--	12
x d.Femur	--	--	1	2	1	--	--	--	--	--	--	2	--	--	--	--	--	--	1	--	--	--	--	7
x Patella	--	--	1	1	--	--	--	--	--	--	--	1	--	--	--	--	--	--	1	--	--	--	--	4
x p.Tibia	1	--	1	--	1	--	1	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--	2	8
s.Tibia	8	--	--	6	5	--	--	--	5	--	1	5	1	--	2	2	--	--	2	--	--	1	--	38
x d.Tibia	1	--	--	2	4	--	--	1	6	1	--	2	--	--	--	--	--	--	2	--	--	3	1	23
x Os Mal.	--	--	--	--	2	1	--	--	3	1	--	2	--	--	--	--	--	--	3	--	--	1	1	14
x Astragalus	1	--	2	4	6	--	--	1	10	3	--	13	1	--	--	3	--	1	1	--	--	3	1	50
x Calcaneum	1	--	--	1	7	3	4	--	8	--	--	6	--	1	1	--	--	--	1	--	--	1	2	36
Tarsal	1	--	--	8	7	2	--	1	2	--	--	7	--	2	1	--	--	--	2	--	--	1	--	29
x p.Metatars	--	--	1	2	4	--	1	1	5	1	--	7	--	1	--	1	--	--	1	--	--	1	--	26
s.Metatars	2	--	--	1	3	2	--	1	3	--	--	7	--	--	1	2	--	--	1	--	--	--	--	23
x d.Metatars	--	--	--	3	6	1	1	1	2	--	--	5	1	--	1	--	--	--	--	--	--	--	1	22
x p.Metapod.	--	--	--	1	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2
s.Metapod.	3	--	--	--	1	--	--	--	--	--	--	--	1	--	3	--	--	1	--	--	--	--	--	9
x d.Metapod.	1	--	1	--	3	--	1	3	2	2	--	7	--	--	--	2	--	--	--	--	--	--	1	23
Sesamoid	1	--	--	--	2	--	1	--	6	--	--	--	--	--	--	--	--	--	--	--	--	1	--	11
x Phalanx 1	2	--	--	5	10	2	4	4	11	7	1	23	2	--	8	11	1	--	3	--	1	2	2	99
x Phalanx 2	5	1	1	3	6	3	4	2	10	1	--	17	1	1	4	5	1	1	4	--	--	4	3	77
x Phalanx 3	1	--	--	--	4	--	2	--	8	3	1	10	--	--	--	1	--	--	1	--	--	2	1	34
TOTAL	84	6	26	98	287	36	89	49	229	37	8	258	10	8	46	58	7	5	80	2	1	76	53	1548

TABLE 5.2

Bos sp. orbital rims of zygomatic bones from Tepe Yahya

locus-id	period	description: nasal portion	middle portion	nuchal portion
1941-3	VIIB.4	sharp	flat & wide	missing
2107-3	VIIB.3	?flat & narrow	flat & medium	missing
186-1	VIIB.2	?flat & wide	flat & wide	missing
212-1	VIIB.1	narrow, pinched	flat & medium	flat & medium
1933-31	VIIA-VIB.2	narrow-medium	flat & wide	?flat & wide
159-44	VIB.2	flat & medium	flat & medium	flat & medium
159-46	VIB.2	missing	missing	flat & wide
1914-13	VIB.1	missing	flat & medium	flat & medium
792-1	VIIA-VIA	missing	flat & wide	flat & wide
1343-10	VB	missing	?flat & medium	missing
517-2	VIA-IVC	missing	flat & medium	missing
555-1	IVC.2	missing	pinched, narrow & sloping	sloping & medium

Note: see Figure 5.1A and Plates VI and VII.

Key: sharp = orbital rim less than c. 4 mm dorso-basally;
narrow = c. 4 mm to less than 9 mm; medium = c. 9 - 14 mm;
wide = greater than c. 14 mm; flat = parallel with medial plane;
pinched = convex profile; ? = portion damaged;
missing = portion broken away and missing.

TABLE 5.3

Bos indicus (Museum of Comparative Zoology 51755) male
collected by S.J. Olsen, 1957, Ft. Meade, Florida, USA
post-cranial measurements in millimeters

Skeletal part	Dimension definition	Values Left	Right	Average
Scapula	**SLC	63.5	65.0	63.8
	BG	58.3	59.1	58.7
Humerus	BT	89.0	90.0	89.5
Radius	Bp	95.8	96.4	96.1
	BFp	87.2	87.0	87.1
	Bd	86.0	82.5	84.3
	BFd	66.0	65.8	65.9
Ulna	BPC	56.5	56.0	56.3
	**DPA	78.2	79.2	78.7
Radial carpal	*L	34.0	34.0	34.0
Intermediate carp.	*L	31.4	31.4	31.4
Ulnar carpal	*L	37.2	36.2	36.7
Os carpale II+III	GB	38.4	38.8	38.6
Os carpale IV	*B	33.9	34.3	34.1
Metacarpal	Bp	65.5	65.8	65.7
	Bd	68.8	69.0	68.9
Phalanx 1 anterior	GLpe	67.5 / 70.0 / 69.5 / 67.9		68.7
	**SD	29.2 / 29.2 / 28.7 / 29.5		29.2
Phalanx 2 anterior	GL	44.2 / 43.7 / 44.0 / 43.9		44.0
	**SD	25.7 / 24.2 / 25.2 / 24.8		25.0
Pelvis	LA	80.0	81.0	80.5
Femur	DC	55.0	54.8	54.9
Tibia	Bd	71.8	71.4	71.6
Os malleolare	GD	40.3	40.3	40.3
Astragalus	GLl	75.4	75.4	75.4
	Bd	51.5	51.2	51.4
Central+IV tarsal	GB	67.1	66.3	66.7
Os tarsale II+III	*D	40.5	40.7	40.6
Metatarsal	Bp	54.4	54.3	54.4
	Bd	64.7	63.8	64.3
Phalanx 1 posterior	GLpe	69.0 / 69.2 / 68.9 / 68.9		69.0
	**SD	27.5 / 27.5 / 26.5 / 27.0		27.1
Phalanx 2 posterior	GL	45.7 / 44.5 / 45.2 / 45.5		45.2
	**SD	24.0 / 24.1 / 23.5 / 23.8		23.9
average Metapodial	Bd	--	--	66.6
average Phalanx 1	GLpe	--	--	68.9
	**SD	--	--	28.1

Notes: for dimension definitions, see von den Driesch (1976: 74-99) except those marked with * for which see Stampfli (1963) as follows: L(engths) of radial, intermediate, ulnar carpals: dimensions "M1" (pp. 137-139); B(readth) of Os carpale IV: dimension "M1" (pg. 141); D(epth) of Os tarsale II+III: dimension "M1" (pg. 155). ** = dimension not used to calculate log differences.

TABLE 5.4

ID Number	Period	Skeletal Part	Log difference
3732-11	4C.2	Talusl	-.029
3732-3	4C.2	Humer	-.033
3712-2	4C.2	Talusl	-.039
3712-1	4C.2	Tibia	-.039
3711-1	4C.2	Scap	-.040
309-1	4C.1	Humer	-.040
3710-28	4C.2	Ph2An	-.041
295-1	4C.2	Talusl	-.042
3737-14	4C.2	Ph2Ps	-.042
554-2	4C.1	C-Rad	-.047
309-3	4C.1	Mall	-.058
468-13	4C.1	Ph1Ps	-.059
304-1	5A-4C.2	Ph1Ps	-.063
309-4	4C.1	Talusb	-.064
280-9	4C.1	Rad	-.072
3745-33	4C.2	Ph1Ps	-.075
3712-3	4C.2	Mall	-.083
3766-42	4C.2	T-C+4	-.089
3758-23	4C.2	C-2+3	-.094
3722-16	4C.2	Tibia	-.095
296-16	4C.1	Ph2An	-.097
3728-2	4C.2	Mt	-.098
399-45	4C.1	Mt	-.101
3718-19	4C.1	Ph2Ps	-.102
362-1	4C.1	Humer	-.127
3742-1	4C.2	Rad	.017
1904-3	5A	Ph2Ps	-.012
1908-23	5A	Mall	-.018
1906-1	5A	Pelv	-.034
1903-3	5A	Pelv	-.034
1327-16	5A	Ph2An	-.038
1318-8	5A	C-Uln	-.038
1904-2	5A	Ph1Ps	-.042
1905-18	5A	Pelv	-.048
1338-14	5A	T-2+3	-.074
1334-1	5A	Ph2Ps	-.094
1316-12	5A	Talusb	-.131
1321-1	5A	Ph2Ps	.010
1903-4	5A	Pelv	.011
1908-22	5A	Tibia	.020
312-4	5B	Ph2An	-.005
1343-13	5B	Ph2An	-.012

Table 5.4=1

1362-1	5B	Ph1	-.019
1357-3	5B	Ph1Ps	-.026
1348-1	5B	Mt	-.027
1353-5	5B	Ph1An	-.038
318-3	5B	Ph1	-.046
1355-3	5B	Ph1An	-.048
1347-7	5B	Talusl	-.058
1356-1	5B	Ph1	-.060
1360-1	5B	Ph1	-.062
1348-2	5B	Ph1Ps	-.100
1365-1	5B	Talusl	.001
1358-1	5B	Ph2An	.004
1355-4	5B	Ph2Ps	.008
759-9	5C	T-2+3	-.006
759-2	5C	Mc	-.025
801-1	5C	Ph2An	-.026
784-3	5C	C-4	-.034
800-1	5C	Mt	-.035
1910-14	5C	Ph2Ps	-.040
756-5	5C	Ph1	-.040
311-7	5C	Ph1Ps	-.046
756-6	5C	Ph1	-.048
770-2	5C	Ph1Ps	-.075
844-1	5C	Humer	-.098
808-1	5C	Ph2Ps	.027
859-7	5-6	Ph2An	-.052
859-1	5-6	Mc	-.077
761-1	5-6	Ph1	.006
1928-1	6A	Ph2Ps	-.001
699-1	6A	Mt	-.011
1924-4	6A	C-Int	-.013
1915-34	6A	C-Int	-.015
1916-9	6A	Ph2An	-.015
1916-11	6A	Talusl	-.017
745-8	6A	C-Rad	-.017
705-1	6A	Talusb	-.018
1915-10	6A	Ph1	-.019
729-8	6A	Mc	-.020
729-10	6A	Ph1An	-.021
698-7	6A	Ph1Ps	-.023
698-8	6A	Ph1An	-.029
745-10	6A	Ulna	-.029

Table 5.4-2

1918-56	6A	Talusl	-.031
724-5	6A	Mc	-.032
1915-8	6A	Tibia	-.033
1917-1	6A	Ph1Ps	-.033
849-19	6A	Ph1Ps	-.033
1918-55	6A	Talusl	-.034
1922-1	6A	Ph1	-.035
1916-16	6A	C-2+3	-.038
1918-58	6A	Mc	-.042
745-7	6A	C-2+3	-.043
1924-3	6A	Mc	-.044
848-3	6A	Talusl	-.045
745-4	6A	Rad	-.045
720-4	6A	Ph1Ps	-.049
853-3	6A	Mt	-.049
705-2	6A	Ph1An	-.054
729-7	6A	Mt	-.054
1918-64	6A	C-2+3	-.060
1918-53	6A	T-2+3	-.061
1918-118	6A	Ph2An	-.061
1918-52	6A	T-C+4	-.062
724-6	6A	C-2+3	-.064
731-2	6A	Ulna	-.065
1916-8	6A	Rad	-.068
1915-25	6A	Mall	-.070
1918-115	6A	Ph1	-.074
729-9	6A	T-C+4	-.077
698-6	6A	Mt	-.080
699-2	6A	Talusb	-.096
1916-17	6A	C-Uln	-.101
698-3	6A	Rad	-.139
1350-1	6A	Talusl	.001
731-1	6A	Rad	.007
1916-10	6A	Ph2Ps	.010
718-3	6A	Talusl	.014
1915-7	6A	Ph2An	.027
1922-2	6A	Mt	.061
1930-107	6B	Talusb	-.008
159-22	6B	Ph1	-.009
746-1	6B	Ph2Ps	-.010
854-10	6B	Humer	-.014
814-1	6B	Rad	-.017

Table 5.4-3

1914-32	6B	Ph2An	-.018
1925-1	6B	Ph2Ps	-.020
171-21	6B	Talusl	-.021
159-26	6B	Ph2Ps	-.022
1932-28	6B	Ph1An	-.027
717-9	6B	Talusl	-.028
159-31	6B	Talusl	-.029
1932-30	6B	Mc	-.029
717-1	6B	Mt	-.032
1927-1	6B	Mc	-.033
171-24	6B	Ph2Ps	-.036
717-2	6B	Tibia	-.037
746-4	6B	Mt	-.037
814-2	6B	Ulna	-.039
820-1	6B	Ph1	-.042
159-30	6B	Mall	-.045
814-3	6B	Mc	-.054
727-3	6B	Talusl	-.054
159-33	6B	Talusb	-.056
171-23	6B	Ph2Ps	-.057
794-6	6B	Mt	-.064
1925-5	6B	Mc	-.067
1932-31	6B	Mt	-.068
1930-115	6B	Rad	-.073
159-36	6B	Ph1Ps	-.092
1930-16	6B	C-Uln	-.093
794-7	6B	Talusb	-.097
1930-117	63	Ph1Ps	.003
1932-29	6B	Mc	.004
1930-110	6B	Mt	.006
132-27	6B	Mt	.007
1923-3	6B	Talusb	.010
171-22	6B	Ph2An	.015
1923-2	6B	Mall	.020
167-14	6B	Mall	.023
159-27	6B	Ph2An	.031
1930-108	6B	Ph2An	.033
171-8	6B	T-2+3	.095
1933-12	6-7	Ph2An	-.009
704-2	6-7	C-Rad	-.020
843-2	6-7	Talusl	-.023
704-1	6-7	Mc	-.025

Table 5.4-4

1934-6	6-7	Mc	-.025
1933-13	6-7	Ph2Ps	-.027
747-9	6-7	Ph1Ps	-.031
1933-11	6-7	Ph1An	-.038
1931-12	6-7	Talusb	-.039
728-6	6-7	Talusl	-.039
843-3	6-7	Mt	-.043
1933-1	6-7	Mt	-.043
792-8	6-7	Ph1An	-.054
1934-3	6-7	Tibia	-.056
748-9	6-7	C-2+3	-.058
1931-4	6-7	C-Int	-.061
1933-21	6-7	Scap	-.072
1931-2	6-7	Humer	-.113
747-10	6-7	Ph2Ps	.024
822-8	7A	Mc	-.015
1936-39	7A-7B	Mall	-.016
1376-2	7A	Ph1	-.017
1936-37	7B-7A	Ph2Ps	-.018
1935-24	7B-7A	Ph2An	-.025
1374-3	7A	Pelv	-.025
842-8	7A	Mc	-.029
815-5	7A	Femur	-.030
1936-36	7B-7A	Ph1Ps	-.032
1938-30	7A-B	Mc	-.032
1935-23	7B-7A	Mt	-.037
1938-25	7A-7B	T-C+4	-.037
161-79	7A	Ph1An	-.045
175-3	7A	Mc	-.049
1375-3	7A	Mc	-.065
757-7	7A	Ph1An	-.066
165-2	7A	C-2+3	-.068
165-1	7A	C-4	-.073
842-7	7A	C-2+3	-.079
165-3	7A	Ph2An	.010
1938-26	7B-7A	T-2+3	.011
170-4	7A	Mt	.020
839-1	7B	Ph2Ps	-.004
2309-36	7B	Talusl	-.008
2305-8	7B	Mc	-.015
1941-16	7B	Ph2Ps	-.019
2103-1	7B	Mt	-.019

Table 5.4-5

192-1	7B	Ph1	-.020
2308-69	7B	C-4	-.021
198-35	7B	Talusl	-.021
2305-10	7B	Mt	-.023
194-2	7B	Ph1Ps	-.023
1942-10	7B	C-Int	-.027
182-2	7B	Humer	-.028
2109-1	7B	Talusb	-.028
889-2	7B	Ph2An	-.028
195-15	7B	Mt	-.032
1942-9	7B	C-Rad	-.033
893-5	7B	C-4	-.034
183-1	7B	Ph1Ps	-.038
195-13	7B	T-2+3	-.043
201-1	7B	Rad	-.045
2309-38	7B	T-C+4	-.046
195-5	7B	C-Rad	-.046
194-3	7B	Mt	-.046
2111-25	7B	Femur	-.047
195-10	7B	Talusl	-.048
2113-52	7B	C-2+3	-.053
195-4	7B	C-Int	-.053
2111-22	7B	Tibia	-.059
202-1	7B	Humer	-.060
881-12	7B	C-2+3	-.062
194-4	7B	T-C+4	-.064
185-14	7B	Mc	-.064
2112-52	7B	T-C+4	-.067
1941-17	7B	Ulna	-.069
1942-11	7B	C-Uln	-.069
195-12	7B	T-C+4	-.070
214-63	7B	C-Int	-.074
2108-31	7B	Humer	-.074
889-3	7B	Mt	-.074
883-8	7B	C-4	-.075
210-2	7B	Ulna	-.079
2305-9	7B	Mt	-.080
2116-1	7B	Pelv	-.083
2101-3	7B	Mall	-.089
213-1	7B	Pelv	-.093
2309-39	7B	Talusl	.002
2308-68	7B	Mc	.003

Table 5.4-6

206-4	7B	Ph2An	.006
182-3	7B	Ph2Ps	.019
184-1	7B	Mt	.023
2124-4	7C	C-2+3	-.002
2118-5	7C	Ph1	-.009
852-2	7C	Talusl	-.013
816-4	7C	Ph1	-.015
2128-33	7C	C-Int	-.020
2128-32	7C	Talusl	-.023
2126-29	7C	T-2+3	-.037
701-6	7C	Talusl	-.040
2123-8	7C	Talusl	-.043
701-2	7C	Pelv	-.045
2124-16	7C	Femur	-.049
2122-14	7C	C-Int	-.054
2122-15	7C	C-Rad	-.057
701-3	7C	Mc	-.059
2117-12	7C	Ph1	-.060
701-4	7C	Femur	-.061
847-7	7C	Tibia	-.062
2122-4	7C	T-C+4	-.062
831-4	7C	Mt	-.068
2118-7	7C	Scap	-.078
749-5	7C	Humer	-.080
701-7	7C	T-C+4	-.082
2125-14	7C	C-Uln	-.105
2117-6	7C	Ph2Ps	.002
2128-35	7C	Mt	.027
2129-32	7C	Ph2An	.060
180-19	7D	Ph2An	-.036
827-1	7D	Talusb	-.042
180-18	7D	Mc	.037
833-10	7E	C-2+3	-.055
160-18	7E	Ph2Ps	.003
3529-2	R37	Mc	-.004
3560-49	R37	C-Rad	-.022
3561-2	R37	Talusl	-.030
3563-18	R37	Humer	-.032
3566-19	R37	Ph2An	-.033
3556-14	R37	Mc	-.057
3504-33	R37	Ph1An	-.074
3562-25	R37	Scap	-.080

Table 5.4-7

3525-6	R37	C-Rad	.009

TABLE 5.4: Log differences for dimensions of *Bos* sp. bones from Tepe Yahya and Tepe Gaz Tavila-R37

Notes: for standard and measurement definitions see Table 5.3; data are plotted here in Figures 5.2, 5.3, 5.4; Scap = scapula BG, Humer = humerus BT, Rad = radius Bp, BFp, Bd, or BFd, Ulna = ulna BPC, C-Rad = radial carpal L, C-Int = intermediate carpal L, C-Uln = ulnar carpal L, C-2+3 = os carpale II+III GB, C-4 = os carpale IV B, Mc = metacarpal Bp or Bd, Ph1 = phalanx 1 GLpe, Ph1An = anterior Ph1, Ph1Ps = posterior Ph1, Ph2An(Ps) = anterior (posterior) phalanx 2 GL, Pelv = pelvis LA, Femur = femur DC, Tibia = tibia Bd, Mall = os malleolare GD, Talusl = astragalus GL1, Talusb = astragalus Bd, T-C+4 = Os tarsale centrale + IV GB, T-2+3 = os tarsale II+III D, Mt = metatarsal Bp or Bd.

TABLE 5.5

Site	Period	Skeletal Part	Log difference
S-I-S	1-4	Scapula	-.145
S-I-S	1-4	Scapula	-.063
S-I-S	1-4	Scapula	.076
S-I-S	1-4	Px.Radius	-.138
S-I-S	1-4	Px.Radius	-.045
S-I-S	1-4	Px.Radius	.022
S-I-S	1-4	Ds.Radius	-.102
S-I-S	1-4	Ds.Radius	-.015
S-I-S	1-4	Ds.Radius	.038
S-I-S	1-4	Ds.Tibia	-.135
S-I-S	1-4	Ds.Tibia	-.035
S-I-S	1-4	Ds.Tibia	.049
S-I-S	1-4	Talus	-.105
S-I-S	1-4	Talus	-.028
S-I-S	1-4	Talus	.031
S-I-S	1-4	Px.Mc	-.090
S-I-S	1-4	Px.Mc	-.028
S-I-S	1-4	Px.Mc	.031
S-I-S	1-4	Ds.Mc	-.072
S-I-S	1-4	Ds.Mc	-.033
S-I-S	1-4	Ds.Mc	.037
S-I-S	1-4	Px.Mt	-.128
S-I-S	1-4	Px.Mt	-.057
S-I-S	1-4	Px.Mt	.009
S-I-S	1-4	Ds.Mt	-.107
S-I-S	1-4	Ds.Mt	-.040
S-I-S	1-4	Ds.Mt	.039
S-I-S	1-4	Ph1An	-.102
S-I-S	1-4	Ph1An	-.045
S-I-S	1-4	Ph1An	.016
S-I-S	1-4	Ph1Ps	-.086
S-I-S	1-4	Ph1Ps	-.032
S-I-S	1-4	Ph1Ps	.044
S-I-S	1-4	Ph2An	-.084
S-I-S	1-4	Ph2An	-.029
S-I-S	1-4	Ph2An	.041
S-I-S	1-4	Ph2Ps	-.102
S-I-S	1-4	Ph2Ps	-.028
S-I-S	1-4	Ph2Ps	.030

TABLE 5.5: Log differences for extreme and average dimensions of *Bos* sp. bones from Shahr-i Sokhta

Notes: for standard and measurement definitions see Table 5.3; data from Caloi and Compagnoni (1981: table 3) and plotted here in Figure 5.5.

TABLE 5.6
(following page)

Specimen counts of bones identified as *Gazella* sp. arrayed by temporal unit and skeletal part

Note: x = skeletal parts included in standardized counts

TABLE 5.6

GAZELLA sp.	R37	YAHYA 7D	7C	7B	7B/7A	7A	7A/6B	6B	7A/6A	6A	5C	5B	5C/A B/A	5A	5A/4C	4C2	4C2/4C1	4C1	TOTAL
Horncore	--	1	2	2	1	--	--	3	--	--	1	1	--	--	--	2	1	--	14
x Occiput	--	--	--	--	--	--	--	--	--	--	--	--	1	1	--	2	--	--	4
Skull	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	2
x Max/Teeth	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	1
Maxillary	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x Man/Teeth	1	--	--	1	--	--	--	--	--	1	--	--	--	--	--	--	--	--	3
Mandible	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	--	1	3
x up. D3/M3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x lw. D3/M3	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
Teeth	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	1	2
Hyoid	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x Atl/Axis	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Vertebrae	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	1
x Sacrum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Ribs	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Cst/Str	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x d.Scapula	2	--	1	2	--	--	--	1	1	1	--	--	--	1	--	1	--	--	10
Scapula	1	--	--	--	1	--	1	--	--	--	--	--	--	--	--	1	--	--	4
x p.Humerus	1	--	--	1	--	--	--	--	--	--	1	--	--	--	--	--	--	--	3
s.Humerus	1	--	1	3	--	--	--	1	--	1	1	--	--	--	--	--	--	--	8
x d.Humerus	--	--	--	2	--	--	--	--	--	--	--	--	--	1	--	--	--	--	3
x p.Radius	--	--	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	1	3
s.Radius	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	1
x d.Radius	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x p.Ulna	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	1	--	2
s.Ulna	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1
d.Ulna	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Carpal	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x p.Metacarp	--	--	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--	2
s.Metacarp	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	1	--	--	2
x d.Metacarp	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x Acetabulum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	1
Pelvis	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
x p.Femur	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1
s.Femur	--	--	--	1	--	--	--	--	--	--	--	1	--	--	--	3	--	--	5
x d.Femur	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x Patella	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x p.Tibia	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	1	2
s.Tibia	1	--	--	1	1	--	--	2	--	--	--	1	--	--	--	--	--	--	6
x d.Tibia	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	1
x Os Mal.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x Astragalus	--	1	--	--	--	--	--	--	--	1	--	--	--	--	--	1	--	--	3
x Calcaneum	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
Tarsal	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x p.Metatars	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
s.Metatars	--	--	--	1	--	--	--	--	--	--	--	1	--	--	--	--	--	1	3
x d.Metatars	--	--	--	--	--	1	--	1	--	--	--	--	--	1	--	--	--	--	3
x p.Metapod.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
s.Metapod.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1
x d.Metapod.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Sesamoid	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x Phalanx 1	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	1	--	3	5
x Phalanx 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x Phalanx 3	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	2
TOTAL	11	2	4	20	4	1	1	9	1	6	6	5	1	5	0	17	2	11	106

TABLE 5.7
(following page)

Specimen counts of bones identified as *Ovis* sp. or *Capra* sp. or *Gazella* sp. (i.e., small bovid) arrayed by temporal unit and skeletal part

Note: x = skeletal parts included in standardized counts

TABLE 5.7

	OVIS/CAPRA/ GAZELLA	R37	YAHYA 7D	7C	7B	7B/ 7A	7A	7A/ 6B	6B	7A/ 6A	6A	5C	5B	5C/A B/A	5A	5A/ 4C	4C2	4C2/ 4C1	4C1	TOTAL
	Horncore	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x	Occiput	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
	Skull	--	--	1	2	--	1	--	--	--	--	1	--	--	1	--	9	--	1	16
x	Max/Teeth	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
	Maxillary	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x	Man/Teeth	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
	Mandible	1	--	--	4	--	--	--	1	1	--	1	--	--	1	--	1	--	1	11
x	up. D8/M3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x	lw. D8/M3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
	Teeth	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--	2
	Hyoid	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x	Atl/Axis	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
	Vertebrae	--	--	--	8	3	--	1	1	--	--	3	--	--	1	3	11	--	11	42
x	Sacrum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
	Ribs	--	--	--	--	4	--	--	--	--	--	--	--	--	--	--	3	--	1	8
	Cst/Str	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x	d.Scapula	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
	Scapula	1	--	1	2	--	3	--	5	1	2	1	--	1	--	--	5	--	2	24
x	p.Humerus	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	1
	s.Humerus	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	2	--	--	3
x	d.Humerus	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1
x	p.Radius	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
	s.Radius	2	--	1	3	--	1	1	2	--	--	--	1	2	1	--	4	--	1	19
x	d.Radius	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1
x	p.Ulna	--	--	1	--	--	--	--	--	--	--	--	1	--	--	--	1	--	--	3
	s.Ulna	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
	d.Ulna	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
	Carpal	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	3	--	--	4
x	p.Metacarp	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1
	s.Metacarp	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x	d.Metacarp	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x	Acetabulum	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	2	--	--	3
	Pelvis	--	--	--	2	--	--	--	1	--	1	--	--	--	--	--	1	--	1	6
x	p.Femur	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	1
	s.Femur	3	1	--	4	--	--	--	--	1	1	1	--	--	--	--	1	--	1	13
x	d.Femur	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	1
x	Patella	--	--	--	--	--	--	--	2	--	--	--	--	--	--	--	1	--	--	3
x	p.Tibia	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	1	--	--	2
	s.Tibia	3	--	--	6	2	1	--	1	--	--	--	2	2	1	--	4	--	5	27
x	d.Tibia	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	3
x	Os Mal.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x	Astragalus	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	1
x	Calcaneum	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	1	--	--	2
	Tarsal	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	1	--	--	2
x	p.Metatars	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1
	s.Metatars	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	1	2
x	d.Metatars	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x	p.Metapod.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
	s.Metapod.	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1
x	d.Metapod.	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
	Sesamoid	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x	Phalanx 1	1	--	--	1	--	--	--	--	--	--	--	--	--	--	--	2	--	--	4
x	Phalanx 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	1
x	Phalanx 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
	TOTAL	15	1	4	35	9	8	3	15	3	5	11	5	6	6	3	58	0	25	212

TABLE 5.8

Sex and Measurements (in millimeters) of <u>Gazella</u> sp. horncores from Tepe Yahya, south side, periods VII-IVC

ID no.	period	Sex	Length	ant.-post. diameter	med.-lat. diameter	circum-ferance
827-10	VIID	F	--	--	--	--
*2118-11	VIIC.2	F	(80.0)	16.3	13.0	47.0
*2126-30	VIIC.2	F	82.5	15.5	14.0	47.0
2115-17	VIIB.6-4	M	--	31.5	22.5	85.5
2102-48	VIIB.2	F	--	(16.5)	13.0	(47.0)
1936-47	VIIB.2-A	M	--	34.0	--	--
159-89	VIB.2	F	(90.0)	(16.5)	15.5	(51.0)
171-41	VIB.2	F	--	17.2	14.8	50.5
* 717-11	VIB.2-1	M	(150.0)	32.8	24.5	92.0
*1913-18	VC	M	(180.0)	--	27.1	--
1357-1	VB	M	(135.0)	32.8	21.8	86.5
3711-65	IVC.2	F	--	--	--	--
3761-40	IVC.2	M	--	31.0	24.0	(87.0)
* 286-6	IVC.2-1	M	142.0	(29.5)	23.8	(83.0)
	range	F	(80-90)	15.5-17.2	13.0-15.5	47.0-(51)
	mean			16.4	14.1	48.5
	standard deviation			0.61	1.10	2.06
	coefficient of variation			3.7%	7.8%	4.2%
	number			5	5	5
	range	M	(135-180)	29.5-34.0	21.8-27.5	(83)-92.0
	mean			33.6	24.0	86.8
	standard deviation			3.08	1.84	3.29
	coefficient of variation			9.2%	7.7%	3.8%
	number			6	6	5

Notes: length = least distance from base of rough area of core to tip; diameters and circumferance are maximum dimensions; * = illustrated in Plates IX and X.

TABLE 5.9

Site	GD	LD	C	Sex
SARAB	31	21	89	M
SARAB	31	21	89	M
SARAB	31	23	90	M
SARAB	32	24	93	M
SARAB	32	22.5	92	M
SARAB	32	24	93	M
SARAB	32.5	23	90	M
SARAB	32.5	25	93	M
SARAB	33	23	94	M
SARAB	33	23.5	94	M
SARAB	33	23	95	M
SARAB	33	26	97	M
SARAB	33	22	88	M
SARAB	34	24	97	M
SARAB	34	27	100	M
SARAB	34.5	24	96	M
SARAB	34.5	23	95	M
SARAB	34.5	23.5	95	M
SARAB	34.5	22	93	M
SARAB	34.5	23.5	97	M
SARAB	34.5	23.5	96	M
SARAB	35	24	97	M
SARAB	35	25	95	M
SARAB	35	25	97	M
SARAB	35	26	99	M
SARAB	35.5	25	100	M
SARAB	35.5	26	100	M
SARAB	36	25	100	M
SARAB	36	26	103	M
SARAB	36	24	99	M
SARAB	36	25	99	M
SARAB	36	25	99	M
SARAB	36	24	101	M
SARAB	36.5	25.5	98	M
SARAB	37	25	108	M
SARAB	37	25	105	M
SARAB	37.5	27	105	M
SARAB	38	26	103	M
SARAB	38	28	110	M
SARAB	39	25	106	M
SARAB	40	25.5	109	M
SARAB	40	27	110	M

JARMO	28	23	87	M
JARMO	30	24	95	M
JARMO	31	23	92	M
JARMO	32	22	95	M
JARMO	32	22	95	M
JARMO	33	23	100	M
JARMO	33	24	95	M
JARMO	33	23	95	M
JARMO	33	23	95	M
JARMO	33	23	95	M
JARMO	34	25	100	M
JARMO	34	24	100	M
JARMO	34	28	100	M
JARMO	34	22	95	M
JARMO	34	25	100	M
JARMO	35	23	95	M
JARMO	35	25	100	M
JARMO	35	25	100	M
JARMO	35	26	105	M
JARMO	36	26	100	M
JARMO	36	25	105	M
JARMO	37	28	105	M
JARMO	37	26	105	M
JARMO	37	25	100	M
JARMO	38	25	110	M
JARMO	38	25	105	M
JARMO	38	28	110	M
JARMO	38	28	110	M
JARMO	38	25	100	M
JARMO	38	29	110	M
JARMO	42	31	120	M
YAHYA	15.5	14	47	F
YAHYA	16.3	13	47	F
YAHYA	16.5	13	47	F
YAHYA	16.5	15.5	51	F
YAHYA	17.2	14.8	50.5	F
YAHYA	29.5	23.8	83	M
YAHYA	31	24	87	M
YAHYA	31.5	22.5	85.5	M
YAHYA	32.8	21.8	86.5	M
YAHYA	32.8	24.5	92	M
MR	11.3	10.7	34.5	F

Table 5.9-2

MR	11.5	10.5	35	F
MR	11.5	9.2	32.5	F
MR	11.7	10.3	34.5	F
MR	11.8	10.4	37.5	F
MR	12	11	36	F
MR	12.3	11.2	38	F
MR	12.4	10.2	36	F
MR	12.5	11.5	37.5	F
MR	12.5	10	35	F
MR	12.6	11.3	38	F
MR	13.5	11	38.5	F
MR	13.6	12.5	48.5	F
MR	14.2	12	41.5	F
MR	26.2	22	75	M
MR	27.2	21	61	M
MR	28.2	20.5	76.5	M
MR	28.5	20.5	82	M
MR	28.6	21	79	M
MR	29	24	85.5	M
MR	30	23	84	M
MR	30	21.3	82	M
MR	30.2	22.5	83	M
MR	31.5	22..5	85	M
MR	31.5	21.5	86	M
MR	31.5	21.5	84	M
MR	32.2	21.1	82.5	M
MR	32.5	25.5	91	M
MR	32.5	26.3	92.5	M
MR	32.7	22.5	94	M
MR	33	25.5	94	M
MR	33	24	95	M
MR	33.8	24.5	99	M

TABLE 5.9: Basal dimensions of *Gazella* sp. horncores from various sites

Notes: GD = greatest diameter at base, LD = least diameter at base, C = circumferance at base; M = male, F = female; dimensions in millimeters; data plotted in Figure 5.6; sites are: Sarab (Bokonyi 1977: 65);
Jarmo (Stampfli 1983: table 28);
Yahya (here, Table 5.8);
Mehrgarh (MR - Meadow, unpublished data).

TABLE 5.10

Measurements (in millimeters) of *Gazella* sp. bones from Tepe Gaz Tavila-R37 and Tepe Yahya, south side, periods VII-IVC

ID no.	period	skeletal part	measurements (in mm)				
		Scapula	SLC	GLP	LG	BG	*Hneck
3350-24	R37		15.4	(29.6)	25.0	20.7	14.2
3560-38	R37		14.9	(26.0)	24.0	18.4	15.2
2112-26	VIIB.6-3		15.5	--	21.5	20.2	15.1
171-72	VIB.2		17.0	--	--	--	--
728-15	VIIA-VIA		16.8	31.0	25.8	23.4	--
1916-46	VIA		13.8	(17.5)	(21.5)	18.9	14.0
3712-10	IVC.2		15.6	--	21.6	18.5	16.5
		Humerus	Bd	BT	SD	Bp	Dp
2309-86	VIIB.5-3		--	--	--	(34.0)	(38.0)
194-7	VIIB.1		25.8	24.3	--	--	--
215-14	VIIB.1		29.5	26.8	--	--	--
1316-10	VA.1		25.1	--	--	--	--
		Radius	Bp	BFp	SD		
308-6	IVC.1		25.5	22.5	(13.6)		
		Ulna	BPC	DPA	SDO		
286-17	IVC.2-1		12.9	19.4	16.1		
		Meta-	Bp	Dp	SD		
848-10	VIA	carpal	--	16.7	--		
1306-1	VC		19.0	13.5	11.2		
		Pelvis	LA	SH	SB		
3738-14	IVC.2		26.0	16.4	7.5		
		Femur	DC				
1306-4	VC		17.0				
		Talus	GLl	GLm	Dl	Bd	Bp
180-22	VIID		28.3	26.3	16.3	16.8	14.8
849-2	VIA		27.4	24.8	15.1	15.8	13.5
3763-60	IVC.2		26.3	23.4	15.0	15.9	14.8
		Calcan-	*B	*D	*GL/e	GB	
3548-7	R37	eum	16.2	22.2	50.6	18.1	
		Meta-	SD	Bd	Dd	DD	
1375-7	VIIA	tarsal	--	(20.0)	15.7	--	
1925-4	VIB.2		10.5	21.0	15.6	9.5	
1908-26	VA.1		--	20.8	16.0	9.5	

TABLE 5.10 (continued)

ID no.	period	skeletal part	measurements (in mm)				
		Phalanx	GLpe	Bp	Bd	SD	
207-10	VIIB.1	1	(38.0)	6.5	7.2	5.8	
3753-70	IVC.2		--	--	8.3	--	
3767-19	IVC.1		36.5	10.0	8.1	7.4	
		Phalanx	DLS	Ld	H		
3562-9	R37	3	25.6	21.0	13.2		
Maxillary		Teeth	*occ.L	*occ.B	*cr.H	wear	approx. age
857-9	VC	M2/	12.7	9.2	18.5	S+	6-20 mo.
+1936-48	VA.2	M2/	14.2	10.1	17.3	M+	24+ mo.
+1936-48	VA.2	M3/	17.1	11.0	22.5	M+	"
Mandibular							
3573-1	R37	M/1	12.7	5.1	20.0	S3	5-8 mo.
++214-2	VIIB.2	M/1	10.0	5.1	(10.5)	M1	21 mo.
++214-2	VIIB.2	M/2	12.6	5.8	17.5	M1	"
++214-2	VIIB.2	M/3	18.3	5.4	20.7	S4	"
--731-22	VIA	M/3	(18.0)	--	--	S8	24 mo.
3715-10	IVC.1	M/2	10.3	6.6	10.0	V1	24+ mo.
203-15	VIIB.2	M/3	19.4	7.4	17.0	M1	24+ mo.
		Mandible	*alv.L P2-M3	*alv.L M1-M3	*alv.L P2-P4	*Least H of Diastema	*H at P4/M1
++214-2	VII.B2		62.2	40.7	20.0	11.2	17.6
			*H after M3	*Length: foramen mentale to processus articularis			
++214-2	VII.B2		29.2	121.5			
--731-22	VIA		30.2	--			

Notes: wear stages are as defined in Meadow (1978; see Appendix 1 herein); approximate ages are as defined by Davis (1980).

Key: +, ++, -- to left of ID number indicate that other measurements from the same specimen are included elsewhere in the table;
* = dimensions not defined in von den Driesch (1976) except for certain mandible measurements (vdD:57-6,7,8,9,15b,15a): H = height, alv.L = alveolar length; for teeth: occ.L = occlusal length, occ.B = occlusal breadth, cr.H = least enamel height between the cusp and root "valleys" taken on the lingual side in lower teeth, buccal side in upper teeth;
for calcaneum: B = breadth across widest portion of bone, D = greatest depth, GL/e = greatest length without epiphysis for unfused specimens; for scapula, Hneck = least height from base of spine to margin of glenoid cavity.

TABLE 5.11

Selected measurements (in millimeters) of bones from a modern female and two modern male gazelles (Gazella bennetti) from southeastern Iran in the collections of the National Museum of Natural History, Smithsonian Institution

Skeletal part	Dimension definition	USNM 328578 female	USNM 328577 male	USNM 329354 male
Horncore	GD at base	13.8	29.0	----
	SD at base	12.9	22.0	----
Scapula	SLC	14.2	13.3	15.1*
	BG	17.3	17.8	18.8
Humerus	BT	21.3	21.4	22.9
	Bd	23.4	23.8	24.5*
Radius	Bp	23.4	23.5	25.2*
	Bd	21.4	21.0	22.7*
Ulna	BPC	13.8	12.5	14.4
	DPA	18.0	18.9	20.7*
Metacarpal	Bp	18.5	19.5	20.0*
	Bd	17.3	17.9	19.9*
Pelvis	LA	23.5	22.3	25.8*
Femur	DC	16.4	16.1	18.3*
Tibia	Bd	21.1	20.2	21.7
	Dd	17.2	17.4	18.7*
Astragalus	GLl	24.1	24.4	26.9*
	Bd	13.9	14.6	14.8
Calcaneum	GL	50.9	53.7	55.9*
Metatarsal	Bp	16.8	17.4	18.0*
	Bd	18.4	18.8	21.6*

Notes: measurements as in von den Driesch (1976); values are averages for right and left dimensions where both could be taken; the female USNM 328578 was collected on 12/31/62 15 km east of Chah Bahar on the Makran coast, the male USNM 328577 on 12/28/62 13 km east of Chah Bahar; of note is that, while the breadth dimensions for these two specimens are similar, the leg bones of the male are from 7-19 mm longer than those of the female; the male USNM 329354 was collected on 2/5/63 near Zahedan in Seistan, eastern Iran; see the text for discussion of possible subspecific identifications.

Key: * = used as the standard for calculating values displayed in Figures 5.7 and 5.8.

TABLE 5.12

Site	Period	Skeletal Part	Log difference
SARAB	Neo	Scap	-.018
SARAB	Neo	Scap	.025
SARAB	Neo	Scap	.111
SARAB	Neo	Ds.Humer	.009
SARAB	Neo	Ds.Humer	.050
SARAB	Neo	Ds.Humer	.109
SARAB	Neo	Px.Radius	-.012
SARAB	Neo	Ds.Radius	-.014
SARAB	Neo	Ds.Radius	.032
SARAB	Neo	Ds.Radius	.091
SARAB	Neo	Px.Mc	.031
SARAB	Neo	Ds.Mc	-.024
SARAB	Neo	Ds.Mc	.063
SARAB	Neo	Ds.Mc	.005
SARAB	Neo	Ds.Tibia	-.041
SARAB	Neo	Ds.Tibia	.007
SARAB	Neo	Ds.Tibia	.050
SARAB	Neo	Talus	-.015
SARAB	Neo	Talus	.014
SARAB	Neo	Talus	.033
SARAB	Neo	Calcan	.007
SARAB	Neo	Calcan	.048
SARAB	Neo	Calcan	-.015
SARAB	Neo	Ds.Mt	-.016
SARAB	Neo	Ds.Mt	.037
SARAB	Neo	Ds.Mt	-.048
728-15	6-7	Scap	.046
3712-10	4C2	Scap	.014
1916-46	6A	Scap	-.039
3560-38	R37	Scap	-.006
3550-24	R37	Scap	.009
2112-26	7B	Scap	.001
171-72	6B	Scap	.051
1316-10	5A	Humer	.011
194-7	7B	Humer	.022
215-14	7B	Humer	.081
308-6	4C1	Px.Radius	.005
286-17	4C2-1	Ulna	-.028
1306-1	5C	Px.Mc	-.022
3738-14	4C2	Pelv	.003
1306-4	5C	Femur	-.032
3763-60	4C2	Talus	-.010

849-2	6A	Talus	.008
180-22	7D	Talus	.022
1375-7	7A	Ds.Mt	-.033
1908-26	5A	Ds.Mt	-.016
1925-4	6B	Ds.Mt	-.012
MR3	Neo	Scap	.038
MR3	Neo	Scap	-.003
MR3	Neo	Scap	-.069
MR3	Neo	Humer	.0001
MR3	Neo	Humer	.042
MR3	Neo	Humer	.081
MR3	Neo	Px.Rad	.009
MR3	Neo	Px.Rad	.027
MR3	Neo	Px.Rad	-.040
MR3	Neo	Ds.Rad	.050
MR3	Neo	Ds.Rad	.013
MR3	Neo	Ds.Rad	-.006
MR3	Neo	Ulna	.027
MR3	Neo	Ulna	.007
MR3	Neo	Ulna	-.030
MR3	Neo	Px.Mc	.041
MR3	Neo	Px.Mc	-.016
MR3	Neo	Px.Mc	-.034
MR3	Neo	Ds.Mc	.063
MR3	Neo	Ds.Mc	.003
MR3	Neo	Ds.Mc	-.060
MR3	Neo	Pelv	-.017
MR3	Neo	Pelv	.016
MR3	Neo	Pelv	-.032
MR3	Neo	Femur	-.027
MR3	Neo	Femur	-.058
MR3	Neo	Femur	.0001
MR3	Neo	Ds.Tibia	.029
MR3	Neo	Ds.Tibia	.005
MR3	Neo	Ds.Tibia	-.039
MR3	Neo	Talus	.010
MR3	Neo	Talus	-.023
MR3	Neo	Talus	-.037
MR3	Neo	Calcan	.012
MR3	Neo	Calcan	.005
MR3	Neo	Ds.Mt	-.014
MR3	Neo	Ds.Mt	.008

Table 5.12-2

MR3	Neo	Ds.Mt	-.051

TABLE 5.12: Log differences for extreme and average dimensions of *Gazella* sp. bones from various sites and for selected *Gazella* sp. bones from Tepe Yahya and Tepe Gaz Tavila-R37

Notes: for standard and measurement definitions see Table 5.11;
data are plotted here in Figures 5.7 and 5.8;
sites are: Sarab (Bokonyi 1977: 66-73);
Yahya (here, Table 5.10);
Mehrgarh (MR - Meadow, unpublished data);
Neo = neolithic;
Scap = scapula SLC, Ds.Humer = humerus Bd, Px.Radius = radius Bp, Ds.Radius = radius Bd, Ulna = ulna DPA, Px.Mc = metacarpal Bp, Ds.Mc = metacarpal Bd, Pelvis = pelvis LA, Femur = femur DC, Ds.Tibia = tibia Dd, Talus = astragalus GL1, Calcan = calcaneum GL, Px.Mt = metatarsal Bp, Ds.Mt = metatarsal Bd.

TABLE 5.13

State of Epiphyseal Union of <u>Gazella</u> sp. and O/C/G Bones from Tepe Gaz Tavila-R37 and Tepe Yahya, south side, periods VII-IVC

Skeletal part	approximate age of fusion	Gazelle				O/C/G			
		FU	EL	UF	n.d.	FU	EL	UF	n.d.
p.Radius	2 mo.	3	0	0	0	0	0	0	0
d.Humerus	2 mo.	3	0	0	0	1	0	0	0
Scapula	3- 6 mo.	8	0	0	2	0	0	0	0
Phalanx 1/2	5- [illegible] mo.	4	0	0	1	1	0	0	4
d.Tibia	8-10 mo.	1	0	0	0	1	0	2	0
d.Metapodial	10-16 mo.	3	0	0	0	0	0	0	1
Calcaneum	10-16 mo.	0	0	1	0	0	0	0	2
p.Femur	10-16 mo.	1	0	0	0	0	0	0	1
d.Femur	10-18 mo.	0	0	0	0	0	0	0	1
p.Humerus	12-18 mo.	2	1	0	0	0	0	0	1
p.Tibia	12-18 mo.	2	0	0	0	2	0	0	0
p.Ulna	12-18 mo.	1	0	0	1	0	0	1	2
d.Radius	12-18 mo.	0	0	0	0	0	0	1	0
	Total	28	1	1	4	5	0	4	12

Note: Ages, from Davis (1980), apply to gazelle only (not to sheep or goat).

Key: FU = fused, EL = epiphyseal line, UF = unfused, n.d. = state of fusion not determinable; p = proximal, d = distal.

TABLE 5.14
(following page)

Specimen counts of bones identified as *Ovis* sp. arrayed by temporal unit and skeletal part

Note: x = skeletal parts included in standardized counts

TABLE 5.14

OVIS sp.	R37	YAHYA 7E	7D	7C	7B	7B/ 7A	7A	7A/ 6B	6B	7A/ 6A	6B/ 6A	6A	6B/ 5C	5C	5C/ 5B	5B	5C/ 5A	5B/ 5A	5A	6/ 4C	5/ 4C	4C2	4C2/ 4C1	4C1	TOTAL
Horncore	1	--	--	--	--	--	--	--	1	--	--	1	--	--	--	--	--	--	--	--	--	6	--	--	9
x Occiput	--	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--	--	--	1	--	2	--	--	5
Skull	--	--	--	--	5	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	4	--	--	11
x Max/Teeth	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Maxillary	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x Man/Teeth	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Mandible	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x up. D8/M9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x lw. D8/M9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Teeth	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Hyoid	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x Atl/Axis	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1
Vertebrae	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x Sacrum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Ribs	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Cst/Str	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x d.Scapula	11	--	--	--	8	--	1	2	2	1	--	1	--	--	--	1	--	--	--	--	--	4	--	2	33
Scapula	6	--	--	1	2	--	--	--	1	--	--	1	--	--	--	1	--	--	--	--	--	1	--	1	14
x p.Humerus	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	1	3
s.Humerus	--	--	--	1	2	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	1	--	1	6
x d.Humerus	--	--	3	3	5	--	3	--	6	1	1	2	3	3	--	2	--	--	4	--	--	9	--	6	51
x p.Radius	2	--	--	--	5	--	2	1	3	2	--	--	--	--	--	3	--	1	2	--	1	10	--	7	39
s.Radius	3	1	2	2	12	1	3	1	2	1	--	5	--	--	--	1	--	--	--	--	2	10	--	4	50
x d.Radius	1	--	--	1	3	--	--	--	2	--	--	--	--	1	--	--	--	1	--	--	1	5	--	4	19
x p.Ulna	--	--	--	--	3	--	--	--	1	--	1	--	--	2	--	2	--	--	2	--	2	2	--	1	16
s.Ulna	--	--	--	1	2	--	1	--	1	--	--	1	--	--	--	--	--	--	1	--	--	4	--	2	13
d.Ulna	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Carpal	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x p.Metacarp	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1
s.Metacarp	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
x d.Metacarp	--	--	--	--	2	--	1	--	3	--	--	1	--	--	--	--	--	--	1	--	--	3	--	1	12
x Acetabulum	1	--	--	--	6	2	1	2	1	--	--	--	--	--	--	--	--	--	5	1	--	5	--	6	30
Pelvis	2	--	--	--	1	--	--	--	1	--	--	1	--	--	--	--	--	--	--	--	--	2	--	1	8
x p.Femur	--	--	1	--	--	--	--	--	2	--	--	1	--	--	--	1	--	1	--	--	1	6	--	2	15
s.Femur	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x d.Femur	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x Patella	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x p.Tibia	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--	1	--	1	4
s.Tibia	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x d.Tibia	3	--	--	--	3	--	--	2	2	1	--	2	--	--	--	--	--	--	2	--	1	9	1	--	26
Os Mal.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x Astragalus	2	1	1	1	7	--	4	3	9	--	1	3	--	1	--	2	--	1	2	--	1	5	--	4	48
x Calcaneum	--	--	--	--	2	--	2	1	2	--	--	1	--	--	--	2	--	--	2	--	1	2	--	1	16
Tarsal	--	--	--	--	--	--	1	2	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6
x p.Metatars	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--	--	--	--	2	--	--	2	--	--	6
s.Metatars	1	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2
x d.Metatars	1	--	--	--	1	--	1	--	1	--	--	2	--	--	--	--	--	--	1	1	--	1	--	--	9
x p.Metapod.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
s.Metapod.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x d.Metapod.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	1
Sesamoid	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x Phalanx 1	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	2	--	--	2	--	--	2	--	3	11
x Phalanx 2	--	1	--	--	2	--	1	--	--	--	--	--	--	2	--	--	--	--	--	--	--	8	--	2	16
x Phalanx 3	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3	--	--	4
TOTAL	36	3	7	10	73	3	22	14	49	7	4	22	3	9	0	19	0	4	27	3	10	109	1	51	486

TABLE 5.15
(following page)

Specimen counts of bones identified as *Capra* sp. arrayed by temporal unit and skeletal part

Note: x = skeletal parts included in standardized counts

TABLE 5.15

CAPRA sp.	YAHYA R37	7E	7D	7C	7B	7B/ 7A	7A	7A/ 6B	6B	7A/ 6A	6B/ 6A	6A	6B/ 5C	5C	5C/ 5B	5B	5C/ 5A	5B/ 5A	5A	6/ 4C	5/ 4C	4C2	4C2/ 4C1	4C1	TOTAL
Horncore	27	--	1	1	12	4	6	1	12	1	--	2	--	1	--	1	--	--	6	1	--	9	--	7	92
x Occiput	--	--	--	1	3	--	--	--	1	--	--	1	--	1	--	--	--	--	--	--	--	--	--	--	7
Skull	6	1	--	--	3	--	--	--	1	--	--	1	--	--	--	--	--	--	1	--	1	10	1	4	29
x Max/Teeth	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Maxillary	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x Man/Teeth	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Mandible	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x up. DB/M3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x lw. DB/M3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Teeth	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Hyoid	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x Atl/Axis	--	--	--	--	1	--	--	--	1	1	--	--	--	--	--	--	--	--	1	--	--	3	2	1	10
Vertebrae	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x Sacrum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Ribs	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Cst/Str	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x d.Scapula	15	--	3	--	10	3	5	4	1	1	--	1	--	1	--	1	--	--	1	--	--	2	--	13	61
Scapula	3	--	1	--	1	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--	1	8
x p.Humerus	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	3	--	3	7
s.Humerus	1	--	--	--	--	--	--	--	--	--	--	1	--	1	--	--	--	1	2	--	--	2	--	1	9
x d.Humerus	4	--	--	3	14	4	2	2	7	1	--	3	1	4	--	1	1	--	4	3	--	22	2	20	98
x p.Radius	5	--	--	2	9	2	2	2	6	--	--	1	1	--	--	2	--	--	2	1	1	12	--	9	57
s.Radius	9	1	1	3	14	1	2	5	4	1	--	8	--	1	1	--	--	--	1	1	--	26	--	8	87
x d.Radius	4	--	--	1	4	1	1	--	4	--	--	3	--	2	--	--	--	1	1	1	--	10	--	13	46
x p.Ulna	1	--	--	--	5	--	1	1	2	--	--	--	1	--	--	3	--	--	3	--	--	6	--	3	26
s.Ulna	12	1	1	4	17	4	3	6	8	1	--	9	--	1	1	1	--	--	3	2	--	35	--	17	126
d.Ulna	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	2
Carpal	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x p.Metacarp	--	--	--	--	2	--	--	--	--	--	--	--	--	1	--	--	--	--	1	--	--	2	--	3	9
s.Metacarp	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x d.Metacarp	2	--	--	--	3	--	1	--	4	--	--	--	--	1	--	--	--	--	2	--	--	4	--	4	21
x Acetabulum	6	--	--	--	10	3	3	--	8	--	--	--	--	--	--	--	2	1	3	1	--	7	--	9	53
Pelvis	1	1	2	--	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4	--	1	14
x p.Femur	--	2	1	--	5	--	--	1	3	--	1	1	1	--	--	2	--	--	3	--	1	15	1	12	49
s.Femur	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x d.Femur	--	--	1	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	2	--	1	5
x Patella	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x p.Tibia	--	--	--	--	2	--	--	--	1	--	--	--	--	--	--	1	--	--	--	--	--	8	--	5	17
s.Tibia	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x d.Tibia	2	--	--	1	6	2	--	--	5	--	2	3	--	1	--	--	--	1	7	--	--	15	--	13	58
Os Mal.	--	--	--	--	1	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--	1	--	1	5
x Astragalus	10	--	2	3	24	1	6	--	13	2	2	6	2	3	2	6	1	1	9	--	1	11	2	14	121
x Calcaneum	--	--	--	--	3	--	2	--	5	--	2	1	--	1	--	3	--	--	3	--	--	7	--	8	35
Tarsal	--	--	--	--	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3	--	--	6
x p.Metatars	--	--	--	1	2	--	--	--	--	--	--	--	--	--	--	--	--	--	2	--	--	5	--	2	12
s.Metatars	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
x d.Metatars	2	--	--	1	5	1	1	--	1	--	--	1	--	1	--	1	--	--	1	--	--	9	--	5	29
x p.Metapod.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
s.Metapod.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x d.Metapod.	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	2	--	1	5
Sesamoid	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x Phalanx 1	5	--	--	--	5	1	1	--	4	--	--	1	--	1	--	4	--	--	2	--	--	14	2	12	52
x Phalanx 2	--	1	--	--	2	--	--	--	2	--	--	--	--	--	--	1	--	1	1	--	1	12	--	4	25
x Phalanx 3	--	--	--	--	2	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	7	--	2	12
TOTAL	115	7	13	21	176	27	36	22	94	8	10	44	6	21	4	28	4	6	60	10	5	270	10	197	1194

TABLE 5.16
(following page)

Specimen counts of bones identified as *Ovis/Capra* arrayed by temporal unit and skeletal part

Note: x = skeletal parts included in standardized counts

TABLE 5.16

OVIS/CAPRA	YAHYA R37	7E	7D	7C	7B	7B/7A	7A	7A/6B	6B	7A/6A	6B/6A	6A	6B/5C	5C	5C/5B	5B	5C/5A	5B/5A	5A	6/4C	5/4C	4C2	4C2/4C1	4C1	TOTAL
Horncore	16	--	--	1	5	1	3	1	3	--	--	2	--	--	--	--	--	--	--	--	--	7	--	1	40
x Occiput	1	--	--	1	2	--	--	--	--	--	--	--	--	--	--	--	--	1	1	--	--	--	8	2	11
Skull	39	--	--	2	30	3	5	1	15	1	--	5	1	2	--	6	--	1	3	--	--	27	2	17	160
x Max/Teeth	6	--	1	3	20	1	7	1	17	--	--	2	1	1	--	--	--	--	2	--	--	16	1	6	85
Maxillary	7	--	--	1	1	--	--	--	2	--	--	1	--	--	--	--	--	--	1	--	--	4	--	3	20
x Man/Teeth	34	--	4	6	57	11	29	4	49	2	2	16	4	7	--	13	--	2	14	3	1	26	--	21	305
Mandible	82	1	5	13	63	3	11	1	26	--	--	28	4	5	--	11	--	1	7	--	--	74	8	36	374
x up. D8/M3	7	--	4	3	24	2	7	1	13	--	--	13	1	4	1	4	--	--	2	--	--	14	--	7	107
x lw. D8/M3	13	1	4	3	24	6	8	1	13	2	--	15	2	3	--	4	2	--	7	--	--	8	--	7	123
Teeth	153	7	12	25	154	19	45	4	92	9	--	83	15	14	4	28	8	11	46	1	6	134	--	47	917
Hyoid	1	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2
x Atl/Axis	8	--	--	3	6	3	2	2	11	--	--	2	--	3	--	--	--	--	4	1	--	8	--	12	65
Vertebrae	4	1	2	4	16	5	13	3	12	1	1	9	1	4	--	2	--	--	10	2	--	116	6	61	273
x Sacrum	--	--	--	1	1	1	--	--	1	--	--	--	--	1	--	--	--	--	--	--	--	6	--	3	14
Ribs	2	--	2	--	5	3	2	1	6	--	--	--	--	3	--	3	--	1	--	--	--	107	--	7	142
Cst/Str	2	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	3	--	1	8
x d.Scapula	3	1	2	4	21	1	2	1	3	--	--	5	2	--	--	--	--	--	3	--	--	8	--	7	63
Scapula	73	--	8	14	63	7	5	8	23	1	2	16	--	7	--	3	1	1	8	2	--	50	--	18	310
x p.Humerus	2	--	--	1	2	--	1	--	4	--	--	2	1	1	--	1	1	--	--	--	--	5	--	5	26
s.Humerus	40	1	5	11	33	12	9	1	18	1	1	24	1	8	--	5	1	--	11	2	--	49	1	18	252
x d.Humerus	8	--	1	--	20	3	6	3	12	--	--	9	--	2	--	2	--	1	2	--	--	14	--	16	99
x p.Radius	7	--	--	--	18	--	1	2	3	2	1	6	1	2	--	1	--	--	1	--	1	7	--	4	57
s.Radius	65	--	8	2	45	18	15	8	13	--	1	24	3	1	--	10	1	3	15	2	1	43	--	15	293
x d.Radius	4	--	1	--	10	1	1	--	1	--	--	--	--	1	1	--	--	--	3	--	--	8	--	3	34
x p.Ulna	9	--	--	--	10	1	--	1	9	--	--	2	--	--	--	1	--	--	3	--	--	4	--	2	30
s.Ulna	19	--	1	1	17	3	4	--	8	1	--	1	--	1	--	2	--	--	2	1	--	14	--	12	87
d.Ulna	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Carpal	3	--	--	--	12	1	1	--	2	--	--	1	--	--	--	1	--	--	--	--	--	17	--	4	42
x p.Metacarp	19	1	1	1	19	3	--	--	3	--	1	2	1	4	--	2	--	--	1	--	--	8	--	2	68
s.Metacarp	8	--	--	2	5	--	4	--	1	--	--	1	--	--	--	1	--	--	1	--	--	6	1	3	33
x d.Metacarp	5	--	--	--	2	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	1	--	3	12
x Acetabulum	21	--	2	--	11	5	2	2	6	--	--	5	--	1	--	2	--	--	6	--	--	19	--	21	103
Pelvis	19	--	1	2	13	1	4	2	3	--	1	1	--	--	--	1	--	--	3	--	2	14	1	7	75
x p.Femur	9	--	1	2	7	1	4	--	2	1	--	2	--	4	--	3	--	--	5	--	--	25	--	11	77
s.Femur	62	--	4	10	34	4	5	3	9	2	--	11	1	6	--	6	--	1	15	--	1	53	1	10	238
x d.Femur	3	--	--	2	13	1	1	1	9	1	--	10	3	1	--	2	2	2	5	--	--	23	--	13	92
x Patella	2	--	--	--	2	--	1	--	3	--	--	--	--	--	--	1	--	--	3	--	--	5	--	4	21
x p.Tibia	4	--	--	--	6	--	--	--	1	--	--	--	--	1	--	1	--	--	4	--	--	9	--	7	33
s.Tibia	81	1	3	13	48	9	8	--	15	--	1	27	3	6	1	17	--	2	21	1	--	68	--	26	351
x d.Tibia	11	1	1	1	8	2	1	1	1	--	--	5	--	1	--	3	--	1	1	--	--	13	--	6	57
Os Mal.	--	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2
x Astragalus	--	1	--	--	3	1	6	--	2	--	--	3	1	--	--	--	--	--	3	--	--	2	--	6	28
x Calcaneum	4	--	--	--	5	1	--	1	6	--	--	--	--	--	--	1	--	--	3	--	2	8	--	13	44
Tarsal	2	1	--	--	7	--	1	--	5	--	--	2	--	2	--	--	--	--	--	1	--	5	--	3	29
x p.Metatars	17	--	2	1	15	--	2	1	5	--	1	6	--	2	--	3	1	--	8	1	--	5	--	8	78
s.Metatars	19	--	--	3	8	1	1	2	2	--	--	5	--	--	--	--	--	--	--	--	--	3	--	3	47
x d.Metatars	--	--	--	1	2	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	1	--	--	5
x p.Metapod.	1	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	3	--	--	7
s.Metapod.	16	--	--	--	4	1	1	--	7	--	--	3	--	1	--	1	--	--	2	1	--	8	--	1	46
x d.Metapod.	5	--	--	1	5	--	--	--	--	--	--	1	--	--	--	--	--	--	1	--	--	3	--	1	17
Sesamoid	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
x Phalanx 1	8	2	--	[illegible]	6	1	--	--	3	--	--	--	--	--	--	1	--	1	--	--	--	8	--	11	43
x Phalanx 2	--	--	--	--	2	--	--	--	3	--	--	--	--	--	--	--	--	--	--	--	--	4	--	1	10
x Phalanx 3	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4	--	3	8
TOTAL	918	19	75	140	888	186	220	57	439	24	12	350	46	99	7	142	17	30	228	18	14	1067	19	498	5463

TABLE 5.17
(following page)

Summary of data from Tables 5.14-5.16 on specimen counts of *Ovis* sp. and *Capra* sp. arrayed by skeletal part

Notes: x = skeletal parts included in standardized counts
%OVIS = *Ovis* x 100 / (*Ovis* + *Capra*)
%O+C = (*Ovis* + *Capra*) x 100 / TOT

TABLE 5.17

TOTALS OVIS+CAPRA	R37 OV	CAP	%OVIS	O/C	TOT	%O+C	TOTAL OV	CAP	%OVIS	O/C	TOT	%O+C	YAHYA OV	CAP	%OVIS	O/C	TOT	%O+C
Horncore	1	27	3.6%	16	44	63.6%	9	92	8.9%	40	141	71.6%	8	65	11.0%	24	97	75.3%
x Occiput	0	0	--	1	1	--	5	7	41.7%	11	23	52.2%	5	7	41.7%	10	22	54.5%
Skull	0	6	0.0%	39	45	13.3%	11	29	27.5%	160	200	20.0%	11	23	32.4%	121	155	21.9%
x Max/Teeth	0	0	--	6	6	0.0%	0	0	--	85	85	0.0%	0	0	--	79	79	0.0%
Maxillary	0	0	--	7	7	0.0%	0	0	--	20	20	0.0%	0	0	--	13	13	0.0%
x Man/Teeth	0	0	--	34	34	0.0%	0	0	--	305	305	0.0%	0	0	--	271	271	0.0%
Mandible	0	0	--	82	82	0.0%	0	0	--	374	374	0.0%	0	0	--	292	292	0.0%
x up. D8/M3	0	0	--	7	7	0.0%	0	0	--	107	107	0.0%	0	0	--	100	100	0.0%
x lw. D8/M3	0	0	--	19	18	0.0%	0	0	--	123	123	0.0%	0	0	--	110	110	0.0%
Teeth	0	0	--	159	158	0.0%	0	0	--	917	917	0.0%	0	0	--	764	764	0.0%
Hyoid	0	0	--	1	1	--	0	0	--	2	2	--	0	0	--	1	1	--
x Atl/Axis	0	0	--	8	8	0.0%	1	10	9.1%	65	76	14.5%	1	10	9.1%	57	68	16.2%
Vertebrae	0	0	--	4	4	--	0	0	--	273	273	0.0%	0	0	--	269	269	0.0%
x Sacrum	0	0	--	0	0	--	0	0	--	14	14	0.0%	0	0	--	14	14	0.0%
Ribs	0	0	--	2	2	--	0	0	--	142	142	0.0%	0	0	--	140	140	0.0%
Cst/Str	0	0	--	2	2	--	0	0	--	8	8	0.0%	0	0	--	6	6	0.0%
x d.Scapula	11	15	42.3%	3	29	89.7%	83	61	35.1%	63	157	59.9%	22	46	32.4%	60	128	53.1%
Scapula	6	3	66.7%	73	82	11.0%	14	8	63.6%	310	332	6.6%	8	5	61.5%	237	250	5.2%
x p.Humerus	0	0	--	2	2	--	3	7	30.0%	26	36	27.8%	3	7	30.0%	24	34	29.4%
s.Humerus	0	1	--	40	41	2.4%	6	9	40.0%	252	267	5.6%	6	8	42.9%	212	226	6.2%
x d.Humerus	0	4	--	8	12	33.3%	51	98	34.2%	99	248	60.1%	51	94	35.2%	91	236	61.4%
x p.Radius	2	5	28.6%	7	14	50.0%	39	57	40.6%	57	153	62.7%	37	52	41.6%	50	139	64.0%
s.Radius	3	9	25.0%	65	77	15.6%	50	87	36.5%	293	430	81.9%	47	78	37.6%	228	353	35.4%
x d.Radius	1	4	--	4	9	55.6%	19	46	29.2%	34	99	65.7%	18	42	30.0%	30	90	66.7%
x p.Ulna	0	1	--	3	4	--	16	26	38.1%	30	72	58.3%	16	25	39.0%	27	68	60.3%
s.Ulna	0	12	0.0%	19	31	38.7%	13	126	9.4%	87	226	61.5%	13	114	10.2%	68	195	65.1%
d.Ulna	0	0	--	0	0	--	0	2	--	0	2	--	0	2	--	0	2	--
Carpal	0	0	--	3	8	--	0	0	--	42	42	0.0%	0	0	--	39	39	0.0%
x p.Metacarp	0	0	--	19	19	0.0%	1	9	10.0%	68	78	12.8%	1	9	10.0%	49	59	16.9%
s.Metacarp	1	0	--	8	9	11.1%	1	0	--	33	34	2.9%	0	0	--	25	25	0.0%
x d.Metacarp	0	2	--	5	7	28.6%	12	21	36.4%	12	45	73.3%	12	19	38.7%	7	38	81.6%
x Acetabulum	1	6	14.3%	21	28	25.0%	30	53	36.1%	103	186	44.6%	29	47	38.2%	82	158	48.1%
Pelvis	2	1	--	19	22	13.6%	8	14	36.4%	75	97	22.7%	6	13	31.6%	56	75	25.3%
x p.Femur	0	0	--	9	9	0.0%	15	49	23.4%	77	141	45.4%	15	49	23.4%	68	132	48.5%
s.Femur	0	0	--	62	62	0.0%	0	0	--	238	238	0.0%	0	0	--	176	176	0.0%
x d.Femur	0	0	--	3	8	--	0	5	--	92	97	5.2%	0	5	--	89	94	5.3%
x Patella	0	0	--	2	2	--	0	0	--	21	21	0.0%	0	0	--	19	19	0.0%
x p.Tibia	0	0	--	4	4	--	4	17	19.0%	33	54	38.9%	4	17	19.0%	29	50	42.0%
s.Tibia	0	0	--	81	81	0.0%	0	0	--	351	351	0.0%	0	0	--	270	270	0.0%
x d.Tibia	3	2	--	11	16	31.3%	26	58	31.0%	57	141	59.6%	23	56	29.1%	46	125	63.2%
Os Mal.	0	0	--	0	0	--	0	5	--	2	7	71.4%	0	5	--	2	7	71.4%
x Astragalus	2	10	16.7%	0	12	100.0%	48	121	28.4%	28	197	85.8%	46	111	29.3%	28	185	84.9%
x Calcaneum	0	0	--	4	4	--	16	35	31.4%	44	95	53.7%	16	35	31.4%	40	91	56.0%
Tarsal	0	0	--	2	2	--	6	6	50.0%	29	41	29.3%	6	6	50.0%	27	39	30.8%
x p.Metatars	0	0	--	17	17	0.0%	6	12	33.3%	78	96	18.8%	6	12	33.3%	61	79	22.8%
s.Metatars	1	0	--	19	20	5.0%	2	1	--	47	50	6.0%	1	1	--	28	30	6.7%
x d.Metatars	1	2	--	0	8	--	9	29	23.7%	5	43	88.4%	8	27	22.9%	5	40	87.5%
x p.Metapod.	0	0	--	1	1	--	0	0	--	7	7	0.0%	0	0	--	6	6	0.0%
s.Metapod.	0	0	--	16	16	0.0%	0	0	--	46	46	0.0%	0	0	--	30	30	0.0%
x d.Metapod.	0	0	--	5	5	--	1	5	16.7%	17	23	26.1%	1	5	16.7%	12	18	33.3%
Sesamoid	0	0	--	0	0	--	0	0	--	0	0	--	0	0	--	0	0	--
x Phalanx 1	0	5	--	8	18	38.5%	11	52	17.5%	43	106	59.4%	11	47	19.0%	35	93	62.4%
x Phalanx 2	0	0	--	0	0	--	16	25	39.0%	10	51	80.4%	16	25	39.0%	10	51	80.4%
x Phalanx 3	1	0	--	0	1	--	4	12	25.0%	8	24	66.7%	3	12	20.0%	8	23	65.2%
TOTAL	36	115	23.8%	918	1069	14.1%	486	1194	28.9%	5463	7143	23.5%	450	1079	29.4%	4545	6074	25.2%

TABLE 5.18

Principal Characters used to Differentiate Bones of Ovis and Capra

Skeletal Part		Character	Source
Skull		horncores	see text
		dimple on frontal	see text
		parieto-occipital suture	B:332,f.45
		fronto-parietal suture	B:332,f.45
		shape of supraoccipital	B:332,f.45
		lacrimal fossa	B:332
		mastoid process	B:332,f.46
Atlas		dorsal tubercle	B:334-5,f.47-8
Axis		transverse canal	B:337
		morphology of dens	B,M,T:44,f.15
Scapula		shape of neck	B:337,f.51-2
		shape of tuber	ibid. & L:288
Humerus	(prox.)	shape of facies musculi infraspinam	B,M,T:63,f.25
		overhang of tuberculum majus caudale	B:339,f.53
	(dist.)	morphology of lateral epicondyle	B:340-1,f.54-5
		shape of trochlea	B:340,f.53
		morphology of medial epicondyle	B:341,f.54-5
Radius	(prox.)	shape and state of fusion of ulnar articular area	B:341-2
		shape of lateral margin	B:341-2,f.56
	(shaft)	state of fusion of ulna to radius	B:341-2
	(dist.)	nature of facettes	B:343,f.57
Ulna		see above under prox. and shaft radius	
Pelvis:	taxon:	location of tubercle for the musculus psoas minor	B:347-8,f.59-60
		ventral margin of the ilium	B:347,f.60
		cranial end of foramen obturatum	B:348
		lateral process at tuber ischiadicum	B:348,f.59-60
	sex:	ventro-medial border of acetabulum	B:345,f.59-60
		ilio-pectineal eminence	ibid.
		thickness of pubic branches	B:345-6,f.59-60
Femur	(prox.)	shape of head	B:348-9,f.61
		angle of trochanter major	B:349,f.61
	(dist.)	synovial pit on trochlea patellaris	B,M,T:97-8,f.54

TABLE 5.18 (continued)

Tibia	(prox.)	configuration of nutrient foramina	B:350,f.63
	(dist.)	lip on midial margin	K:488,f.Db
		morphology of notch for medial articular ridge of astragalus	K:485,f.Aa
Astragalus		morphology of proximo-medial portion	B:350-2,f.65, 67-8
		morphology of medial articular ridge	B:352,f.64-5
Calcaneum		size of lateral process	B:353,f.70
		state of joining of articular surface for astragalus	B:353,f.70
Metapodials			
	(prox.)	synovial pits (metatarsal)	B:354
	(shaft)	longitudinal groove (metatarsal)	B,M,T:108,f.69
	(dist.)	trochlear condyles : verticilli	B:354-5,f.72
Phalanx 1		peripheral profile	B:356,f.75
		posterior margin of distal articular surface	B:356,f.74
Phalanx 2		posterior margin of distal articular surface	B:357,f.76
		profile in distal view	B:357,f.77
Phalanx 3		profile in distal view	B:358,f.78
		profile in peripheral view	B:357-8,f.79

Sources: B = Boessneck (1969):page number,figure number
B,M,T = Boessneck, Muller, and Teichert (1964)
L = Lawrence (1980)
K = Kratochvil (1969)

TABLE 5.19

Attributes of OVIS/CAPRA Horncores from Tepe Gaz Tavila/R37 and from Tepe Yahya, South Side, Periods VII-IVC

ID CODE	PERIOD	PART	HLW	TW	CNL	SEX	AGE	CPL	DEN	ID	NOTES
3728-7	4C	B/C	H	N	M	F	S/A	C	C	????	see text
362-5	4C	*	*	*	*	*	*	*	*	CAP	spec.missing
362-3	4C	F/B	H	ND	ND	F	J?	I	C	CAP	
3750-9	4C	C	H	ND	D	F	ND	C	C	CAP	
543-2	4C	F/B	ND	ND	ND	F?	J/S	I	C	CAP	orien/suture
305-1	4C	C	H	T	D	F?	S/A	C	P/C	CAP	
3734-11	4C	C	H	T	D	F?	S/A	C	C	CAP	
3749-15	4C	C	H	T	D	M?	ND	I	P/C	CAP	
3753-35	4C	T	ND	T	D	M?	ND	C	P	CAP	morphology
3710-32	4C	F/B	ND	ND	ND	M?	Y	I	ND	CAP	orien/dimple
279-50	4C	F/B	ND	ND	I	ND	I/J	I	P/C	CAP	orientation
549-5	4C	B/C	H	N	D	ND	J/S	I	P	CAP	like HF35-8
3745-1	4C	F/B	ND	ND	ND	ND	ND	I	ND	CAP	dimple
3750-11	4C	C	H	ND	D	ND	ND	I	C	CAP	
3761-42	4C	T	ND	T	D	ND	ND	I	P	CAP	
3764-113	4C	C	H	T	M	ND	ND	I	P/C	CAP	
279-46	4C	F/B	ND	ND	ND	ND	S/A	I	ND	CAP	orientation
3753-36	4C	B/C	H	ND	M	F?	ND	I	C	O/C	
3766-26	4C	C	H	ND	I	F?	ND	I	C	O/C	
3715-17	4C	C	ND	ND	I	ND	ND	I	P/C	O/C	
3737-30	4C	C	H	ND	I	ND	ND	I	C	O/C	
3750-10	4C	C	ND	ND	M	ND	ND	I	C	O/C	
3763-88	4C	C	H	ND	ND	ND	ND	I	C	O/C	
3764-112	4C	B	ND	ND	ND	ND	Y	I	P/C	O/C	
295-2	4C	B	ND	ND	M	M	A	I	P	OVIS	section
3709-13	4C	T	ND	T	I	M	ND	C	C	OVIS	morphology
3750-7	4C	F/B	ND	ND	ND	M	ND	I	ND	OVIS	no dimple
3752-11	4C	B	S	ND	ND	M	ND	I	P	OVIS	
3712-31	4C	C	S	ND	I	M	S/A	I	P	OVIS	smashed
3761-39	4C	B/F	ND	ND	ND	M?	A	I	ND	OVIS	orien/suture
517-3	4C/6A	B/C	S	N	D	F	I	C	P/C	CAP	
1316-7	5A	B-T	H	N	D	F	J/S	C	C	CAP	complete
1338-1	5A	C/T	ND	N	D	F	S/A	C	C	CAP	
1337-3	5A	C	H	T	M	F	Y	C	P/C	CAP	
1904-16	5A	C	H	T	D	F?	ND	I	P/C	CAP	
1339-3	5A	T	ND	T	D	F?	S/A	C	C	CAP	tight curl
323-21	5A	C	ND	T	D	M	S/A	I	P	CAP	
1351-1	5B	C	H	N	D	M	S/A	I	P	CAP	
322-2	5C	F-C	H	T	D	M?	I	C	P/C	CAP	dimple
1918-102	6A	B/C	H	ND	D	F?	ND	I	C	CAP	
1918-111	6A	B/C	H	T	M	M	S/A	I	C	CAP	orientation
699-19	6A	C	H	ND	M	F?	ND	I	C	O/C	

731-30	6A	C	ND	ND	I	M	S/A	I	P	O/C	
1915-40	6A	C	S	ND	ND	M	A?	I	P	OVIS	
719-16	6A/7A	C/T	H	T	D	M	S/A	C	P	CAP	
159-217	6B	T	H	ND	D	F	ND	C	P/C	CAP	
1930-104	6B	F/B	ND	ND	ND	F	S/A	I	ND	CAP	orientation
171-42	6B	C	H	N	D	F?	A	I	C	CAP	
785-5	6B	F/B	H	ND	I	F?	J/S	I	C	CAP	orientation
1932-100	6B	C	H	N	D	F?	S/A	C	P/C	CAP	
1349-3	6B	B/F	H	ND	I	M	S/A	I	C	CAP	orien/dimple
1930-105	6B	C	H	T	D	M?	S/A	I	P/C	CAP	
159-216	6B	F/B	H	ND	M	M?	Y	I	P	CAP	orientation
785-4	6B	F-T	H	N	M	ND	I	I	P	CAP	dimple
159-215	6B	C	H	T	D	ND	ND	I	P/C	CAP	
159-282	6B	F/B	ND	ND	ND	ND	ND	I	P	CAP	dimple
1923-55	6B	B/F	ND	ND	ND	ND	ND	I	ND	CAP	orientation
727-21	6B	T	H	N	M	M?	Y	C	P/C	O/C	
821-8	6B	C	H	ND	M	ND	J/S	I	P/C	O/C	
1914-5	6B	B	ND	ND	I	ND	ND	I	C	O/C	
1932-19	6B	B	S	ND	I	M	S/A	C	P/C	OVIS	
1933-33	6B/7A	C	H	T	D	M	S/A	I	P/C	CAP	
1933-34	6B/7A	C	H	ND	ND	F?	ND	I	ND	O/C	smashed
170-2	7A	C	H	T	M	F?	S/A	I	C	CAP	
732-4	7A	C/T	H	T	D	M	J	C	P	CAP	
174-1	7A	F/B	ND	ND	ND	ND	I	I	P	CAP	orientation
165-24	7A	F/B	ND	ND	ND	ND	ND	I	C	CAP	dimple
1375-20	7A	C	ND	ND	D	ND	ND	I	C	CAP	
1376-19	7A	C	H	ND	D	ND	ND	I	C	CAP	
165-52	7A	C	H	ND	M	ND	ND	I	C	O/C	
161-62	7A	B/C	H	ND	M	ND	ND	I	P/C	O/C	
751-5	7A	B/F	ND	ND	ND	ND	S/A	I	ND	O/C	
1936-45	7A/7B	F/B	H	ND	ND	F	J?	I	P/C	CAP	orien/dimple
1938-42	7A/7B	F/B	H	ND	ND	F	ND	I	C	CAP	orientation
1937-56	7A/7B	B/C	H	ND	M	F	S/A	I	C	CAP	orientation
1936-46	7A/7B	C	H	T	D	F?	S/A	I	P/C	CAP	
1937-58	7A/7B	F/B	ND	ND	ND	ND	ND	I	ND	O/C	
206-22/58	7B	F/B	H	ND	I	F	J/S	I	C	CAP	orientation
2112-29	7B	F/B	H	ND	D	F	J/S	C	C	CAP	orien/dimple
197-6	7B	F/B	H	ND	M	F	S/A	C	P/C	CAP	orien/dimple
1942-43	7B	B/C	H	N	D	F	S?	C	C	CAP	orientation
207-38	7B	B	H	ND	ND	F?	ND	I	C	CAP	orientation
2102-49	7B	F/B	H	ND	I	F?	Y	I	C	CAP	orientation
2112-30	7B	T	H	T	D	M	S/A	C	P/C	CAP	
2305-36	7B	B/C	H	T	M	M	S/A	I	P/C	CAP	orientation
199-6	7B	B/C	H	N	D	M	Y	C	P	CAP	
192-2	7B	C/T	H	T	D	M	Y	C	P	CAP	
187-14	7B	C/T	H	N	D	ND	Y	C	P	CAP	
713-19	7B	C	H	ND	D	ND	Y	I	P/C	CAP	
2307-20	7B	F/B	ND	ND	ND	M?	Y	I	P/C	O/C	
2307-23	7B	C	H	ND	M	ND	ND	I	C	O/C	
187-24	7B	B	H	ND	ND	ND	Y	I	P/C	O/C	

Table 5.19-2

2308-12	7B	C	H	ND	ND	ND	Y	I	P	O/C	
2308-11	7B	F/B	H	ND	I	ND	Y	I	P/C	O/C	
2129-28	7C	C	H	ND	D	F?	S/A	I	C	CAP	
2128-19	7C	B	ND	ND	I	ND	Y	I	P/C	O/C	
180-64	7D	C	H	N	D	F?	S/A	I	C	CAP	
3559-34	R37	T	H	T	D	F	ND	C	C	CAP	
3560-54	R37	F/B	ND	ND	ND	F	ND	I	C	CAP	orien/suture
3563-1	R37	F/B	H	ND	ND	F	S/A	I	P/C	CAP	orien/suture
3515-40	R37	B/C	H	ND	D	F?	ND	I	C	CAP	
3561-34	R37	B/C	H	ND	M	F?	ND	I	C	CAP	dimple
3561-64	R37	F/B	ND	ND	ND	F?	ND	I	C	CAP	dimple
3534-1	R37	B/C	H	ND	D	F?	Y	I	P/C	CAP	
3504-25	R37	B/C	H	ND	I	M	S/A	I	C	CAP	orientation
3515-39	R37	B/C	H	T	D	M	S/A	I	P/C	CAP	
3556-13	R37	C	H	ND	D	M	S/A	I	C	CAP	
3561-33	R37	C	H	T	D	M	S/A	I	C	CAP	
3563-3	R37	C	H	T	D	M	S/A	I	C	CAP	
3559-33	R37	B-T	H	T	D	M	Y	C	P/C	CAP	
3515-37	R37	T	ND	ND	D	M	Y?	C	P	CAP	
3503-1	R37	C	H	T	M	M?	ND	I	C	CAP	
3504-28	R37	C	H	ND	D	M?	ND	I	P/C	CAP	
3515-38	R37	F/B	H	ND	M	M?	S/A	I	C	CAP	orientation
3555-1	R37	C	H	T	M	M?	S/A	I	C	CAP	
3547-1	R37	C/T	H	N	D	M?	Y?	C	P/C	CAP	
3504-26	R37	C	H	ND	D	ND	ND	I	C	CAP	
3528-58	R37	C	H	ND	D	ND	ND	I	P/C	CAP	
3554-3	R37	B-T	H	T	D	ND	ND	I	P/C	CAP	
3558-34	R37	C	H	T	D	ND	ND	I	P/C	CAP	
3558-35	R37	B/C	H	ND	D	ND	ND	I	C	CAP	
3563-156	R37	C	H	ND	D	ND	ND	I	P/C	CAP	
3571-7	R37	C	H	ND	D	ND	ND	I	P	CAP	
3560-55	R37	B/C	H	ND	D	ND	Y?	I	P/C	CAP	
3557-11	R37	C	H	ND	M	F?	ND	I	C	O/C	
3557-12	R37	C	H	ND	I	F?	ND	I	C	O/C	
3513-14	R37	C	ND	ND	M	M	ND	I	P/C	O/C	
3513-16	R37	C	ND	ND	M	M?	ND	I	P/C	O/C	
3515-54	R37	C	H	ND	M	M?	ND	I	P/C	O/C	
3504-27	R37	C	H?	ND	M	ND	ND	I	P/C	O/C	
3504-29	R37	B	H	ND	M	ND	ND	I	P/C	O/C	
3513-13	R37	C	ND	ND	D	ND	ND	I	P/C	O/C	
3513-15	R37	B	ND	ND	I	ND	ND	I	P/C	O/C	
3519-48	R37	C	ND	ND	I	ND	ND	I	P/C	O/C	
3519-49	R37	C	ND	ND	D	ND	ND	I	P/C	O/C	
3553-11	R37	C	ND	ND	D	ND	ND	I	P/C	O/C	
3561-68	R37	B	ND	ND	ND	ND	ND	I	P/C	O/C	
3561-88	R37	C	ND	ND	D	ND	ND	I	P/C	O/C	
3556-12	R37	C	H	ND	M	ND	Y	I	P	O/C	
3563-2	R37	B	S?	ND	I	ND	Y	I	P/C	O/C	
3511-54	R37	F-C	S	ND	M	M	S/A	I	P	OVIS	

Table 5.19-3

TABLE 5.19

Notes

PART = part of horn core or skull present: B = base
C = corpus
T = tip
F = frontal
/ = and
- = through

HLW = H(ollow) or S(olid) or N(ot) D(eterminable)

TW = N(ot twisted) or T(wisted) or N(ot) D(eterminable)

CNL = Channeling: D = distinct, M = moderate, I = indistinct, ND = not determinable

SEX = F(emale), M(ale), N(ot) D(eterminable)

AGE = I(nfant), Y(oung), J(uvenile), S(ub-adult), A(dult), N(ot) D(eterminable)

CPL = C(omplete circumferance), I(ncomplete circumferance)

DEN = C(ompact), P(orous), N(ot) D(eterminable), P/C = intermediate

ID = identification: CAP = Capra sp., OVIS = Ovis, O/C = sheep or goat (i.e., not determined)

* = specimen missing: recorded but not able to be located for recording of attribute states.

See Chapter 5, Section 5.4 for discussion of NOTES.

TABLE 5.20

The "Standard Dimensions" for Goats and Sheep
from Uerpmann (1979: Table A3)

		Capra	Ovis
Scapula	*SLC	----	19.5
	BG	24.7	22.0
Humerus	BT	34.2	29.5
Radius	Bp	35.5	33.5
	Bd	33.2	31.0
Ulna	*BPC	25.9	19.0
	DPA	29.5	27.5
Metacarpus III+IV	Bp	27.3	25.0
	Bd	30.5	26.5
Femur	DC	23.0	21.1
Tibia	Bd	----	26.5
	Dd	21.7	----
Astragalus	Ll	32.0	31.3
	*Bd	20.8	19.6
Calcaneum	GL	65.5	64.0
Metatarsus III+IV	Bp	23.0	22.5
	Bd	28.5	26.0
Phalanx 1	*Glpe	40.4	----

Note: Measurement definitions as in von den Driesch (1976) except Dd (distal depth) of tibia that is taken with arm of calipers flat against plantar side.

Key: * = not used for calculation of log differences in this study.

TABLE 5.21

ID Number	Period	Skeletal Part	Log difference
279-15	4C1	Tibia	-.004
3718-18	4C1	Rad	-.006
399-39	4C1	Mt	-.008
279-11	4C1	Humer	-.012
3706-16	4C1	Tibia	-.014
3724-48	4C1	Rad	-.024
302-13	4C1	Rad	-.033
3724-42	4C1	Tibia	-.035
551-4	4C1	Humer	-.040
280-7	4C1	Femur	-.042
3706-12	4C1	Humer	-.043
544-4	4C1	Talus	-.043
279-5	4C1	Femur	-.048
279-16	4C1	Talus	-.049
360-5	4C1	Talus	-.050
3706-17	4C1	Calc	-.051
3715-28	4C1	Talus	-.055
534-11	4C1	Femur	-.056
286-22	4C2-1	Talus	-.056
279-28	4C1	Rad	-.057
3706-15	4C1	Femur	-.059
3724-40	4C1	Humer	-.060
399-22	4C1	Humer	-.060
542-4	4C1	Tibia	-.060
3715-29	4C1	Calc	-.061
360-4	4C1	Ulna	-.062
296-8	4C1	Rad	-.069
534-7	4C1	Humer	-.070
286-15	4C2-1	Humer	-.072
309-12	4C1	Humer	-.072
309-19	4C1	Rad	-.072
309-27	4C1	Talus	-.072
360-3	4C1	Rad	-.073
302-8	4C1	Humer	-.075
308-12	4C1	Tibia	-.076
279-6	4C1	Femur	-.078
534-12	4C1	Femur	-.078
549-2	4C1	Rad	-.080
342-1	4C1	Tibia	-.081
547-9	4C1	Tibia	-.081
547-8	4C1	Tibia	-.081
301-4	4C1	Femur	-.083

282-4	4C1	Scap	-.085
286-19	4C2-1	Femur	-.085
537-8	4C1	Femur	-.088
301-5	4C1	Femur	-.088
537-11	4C1	Mc	-.090
308-13	4C1	Talus	-.090
3715-27	4C1	Talus	-.090
309-7	4C1	Scap	-.092
542-5	4C1	Talus	-.092
550-6	4C1	Humer	-.093
542-6	4C1	Calc	-.093
550-15	4C1	Talus	-.095
3706-13	4C1	Humer	-.095
293-8	4C1	Rad	-.095
3706-14	4C1	Rad	-.096
3707-31	4C1	Talus	-.097
545-9	4C1	Talus	-.097
468-2	4C1	Humer	-.099
542-7	4C1	Mc	-.099
547-1	4C1	Rad	-.100
399-13	4C1	Scap	-.100
293-6	4C1	Rad	-.100
3715-23	4C1	Humer	-.104
409-6	4C1	Femur	-.104
468-4	4C1	Rad	-.106
556-6	4C1	Mt	-.109
301-3	4C1	Femur	-.111
355-5	4C1	Scap	-.112
293-7	4C1	Ulna	-.114
302-23	4C1	Tibia	-.114
280-17	4C1	Humer	-.119
279-7	4C1	Femur	-.119
305-6	4C1	Humer	-.122
554-4	4C1	Calc	-.123
279-23	4C1	Rad	-.132
551-1	4C1	Scap	-.133
279-29	4C1	Mc	-.142
279-24	4C1	Ulna	-.143
308-3	4C1	Scap	-.150
3715-19	4C1	Scap	.002
286-21	4C2-1	Talus	.004
3718-17	4C1	Tibia	.049

Table 5.21-2

1938-6	7A-B	Rad	-.002
1935-8	7A	Talus	-.035
168-1	7A	Scap	-.056
1376-9	7A	Rad	-.065
1376-10	7A	Ulna	-.068
174-4	7A	Talus	-.072
822-9	7A	Rad	-.073
1940-9	7A-B	Rad	-.075
1936-24	7A-B	Tibia	-.076
1938-7	7A-B	Humer	-.082
1935-16	7A-B	Rad	-.082
175-11	7A	Talus	-.082
1938-19	7A-B	Mt	-.084
866-5	7A	Talus	-.095
165-15	7A	Humer	-.095
165-11	7A	Rad	-.098
1937-3	7A-B	Humer	-.106
175-12	7A	Humer	-.106
1936-15	7A-B	Humer	-.106
188-7	7A	Talus	-.107
161-68	7A	Talus	-.112
166-3	7A	Scap	.019
1938-8	7A-B	Tibia	.031
1936-18	7A-B	Scap	.039
1376-11	7A	Scap	.043
2106-2	7B	Talus	-.001
2108-38	7B	Rad	-.012
2302-1	7B	Humer	-.012
2111-28	7B	Talus	-.040
2309-85	7B	Tibia	-.042
2110-8	7B	Talus	-.046
876-19	7B	Talus	-.046
2111-27	7B	Talus	-.047
876-18	7B	Talus	-.050
2113-17	7B	Scap	-.050
183-20	7B	Talus	-.058
194-5	7B	Humer	-.063
191-3	7B	Femur	-.067
2307-55	7B	Mc	-.069
193-2	7B	Tibia	-.069
1941-32	7B	Talus	-.074
2109-5	7B	Talus	-.075

Table 5.21-3

2309-66	7B	Talus	-.075
192-4	7B	Tibia	-.076
182-6	7B	Humer	-.076
196-10	7B	Scap	-.077
191-4	7B	Scap	-.077
2113-19	7B	Rad	-.080
880-4	7B	Humer	-.081
2111-26	7B	Talus	-.082
2102-18	7B	Talus	-.082
2303-5	7B	Scap	-.083
883-1	7B	Mc	-.084
2306-13	7B	Talus	-.085
197-20	7B	Humer	-.085
2113-2	7B	Mt	-.085
2113-4	7B	Mc	-.086
2108-34	7B	Humer	-.087
201-4	7B	Talus	-.087
885-2	7B	Humer	-.087
183-19	7B	Talus	-.089
2108-18	7B	Talus	-.090
192-6	7B	Talus	-.092
194-6	7B	Humer	-.093
194-20	7B	Talus	-.095
207-1	7B	Talus	-.097
197-19	7B	Talus	-.097
206-36	7B	Talus	-.097
206-20	7B	Femur	-.097
2309-48	7B	Mt	-.102
199-1	7B	Mt	-.103
885-3	7B	Humer	-.103
192-5	7B	Calc	-.104
215-38	7B	Talus	-.104
881-10	7B	Rad	-.106
2307-63	7B	Talus	-.107
196-14	7B	Rad	-.116
193-6	7B	Scap	-.116
883-4	7B	Rad	-.125
203-2	7B	Mt	-.135
2302-3	7B	Scap	-.137
885-4	7B	Scap	-.137
2309-74	7B	Ulna	-.137
2108-42	7B	Rad	-.140

Table 5.21-4

2307-62	7B	Humer	-.156
1941-45	7B	Rad	.001
1941-46	7B	Ulna	.007
212-11	7B	Femur	.007
2115-29	7B	Scap	.010
2108-39	7B	Ulna	.049
200-8	7B	Scap	.054
2127-4	7C	Humer	-.025
2120-6	7C	Talus	-.037
180-25	7D	Talus	-.047
180-24	7D	Talus	-.055
2118-16	7C	Talus	-.058
160-21	7E	Femur	-.085
180-53	7D	Scap	-.092
813-8	7C	Mt	-.095
160-20	7E	Femur	-.097
2117-11	7C	Humer	-.101
2117-9	7C	Rad	-.111
180-54	7D	Scap	-.119
2120-5	7C	Tibia	.006
3550-23	R37	Scap	-.004
3561-39	R37	Scap	-.022
3559-39	R37	Humer	-.029
3558-28	R37	Talus	-.052
3515-3	R37	Scap	-.058
3557-17	R37	Rad	-.065
3559-32	R37	Talus	-.067
3549-4	R37	Talus	-.069
3519-22	R37	Talus	-.074
3558-27	R37	Talus	-.074
3561-18	R37	Tibia	-.076
3550-22	R37	Scap	-.085
3506-1	R37	Scap	-.092
3564-19	R37	Talus	-.094
3511-37	R37	Talus	-.094
3504-11	R37	Talus	-.095
3515-32	R37	Rad	-.095
3539-12	R37	Rad	-.096
3542-1	R37	Scap	-.096
3543-5	R37	Talus	-.097
3504-8	R37	Humer	-.098
3560-15	R37	Rad	-.100

Table 5.21-5

3539-9	R37	Scap	-.112
3550-20	R37	Humer	-.124
3528-34	R37	Rad	-.135
3561-38	R37	Scap	-.137
3757-1	4C2	Rad	-.010
294-6	4C2	Femur	-.021
3736-19	4C2	Ulna	-.024
3759-5	4C2	Humer	-.030
3761-27	4C2	Scap	-.031
3750-19	4C2	Femur	-.040
3704-52	4C2	Femur	-.046
3761-2	4C2	Tibia	-.046
3738-6	4C2	Tibia	-.046
3761-12	4C2	Femur	-.050
3704-55	4C2	Tibia	-.053
3746-5	4C2	Rad	-.053
469-2	4C2	Humer	-.054
466-11	4C2	Calc	-.054
3766-3	4C2	Humer	-.055
1304-7	4C2	Mt	-.057
3761-5	4C2	Rad	-.057
3764-30	4C2	Talus	-.058
3732-19	4C2	Rad	-.059
3704-35	4C2	Humer	-.061
555-18	4C2	Femur	-.061
3742-14	4C2	Scap	-.062
3763-32	4C2	Rad	-.066
3742-7	4C2	Tibia	-.067
3713-15	4C2	Femur	-.067
3753-56	4C2	Femur	-.067
467-15	4C2	Tibia	-.069
3712-4	4C2	Talus	-.069
3758-5	4C2	Tibia	-.072
3750-30	4C2	Tibia	-.072
3761-11	4C2	Humer	-.072
3745-30	4C2	Femur	-.074
3761-4	4C2	Rad	-.077
3704-36	4C2	Humer	-.079
3752-19	4C2	Talus	-.080
3764-29	4C2	Talus	-.080
3746-1	4C2	Humer	-.082
3752-27	4C2	Rad	-.082

Table 5.21-6

3722-1	4C2	Humer	-.082
3766-17	4C2	Calc	-.083
3710-5	4C2	Rad	-.083
3711-29	4C2	Rad	-.085
3758-6	4C2	Tibia	-.086
3722-7	4C2	Rad	-.088
3711-27	4C2	Humer	-.088
3758-3	4C2	Mt	-.088
3711-35	4C2	Calc	-.089
555-17	4C2	Talus	-.090
3721-3	4C2	Rad	-.091
3763-20	4C2	Humer	-.092
3766-1	4C2	Humer	-.092
3761-3	4C2	Talus	-.092
3710-6	4C2	Ulna	-.095
3710-1	4C2	Humer	-.095
3710-8	4C2	Ulna	-.095
3764-76	4C2	Rad	-.096
1302-2	4C2	Humer	-.096
3711-25	4C2	Mt	-.097
3750-44	4C2	Humer	-.098
3710-7	4C2	Rad	-.098
3761-17	4C2	Mc	-.100
3750-46	4C2	Calc	-.100
3766-4	4C2	Humer	-.101
3710-9	4C2	Mt	-.102
3710-15	4C2	Mt	-.109
3736-18	4C2	Rad	-.111
555-19	4C2	Mt	-.111
3722-8	4C2	Ulna	-.114
3745-19	4C2	Mc	-.114
555-14	4C2	Tibia	-.116
3753-1	4C2	Talus	-.116
286-14	4C2	Humer	-.117
3711-36	4C2	Calc	-.117
3765-17	4C2	Talus	-.120
3758-2	4C2	Mt	-.122
3721-5	4C2	Mt	-.122
3765-69	4C2	Femur	-.124
3765-20	4C2	Calc	-.132
3766-15	4C2	Tibia	.000
3738-1	4C2	Talus	.005

Table 5.21-7

3711-26	4C2	Tibia	.006
3761-1	4C2	Tibia	.006
3732-17	4C2	Rad	.018
3711-30	4C2	Rad	.018
3745-7	4C2	Rad	.039
325-17	4C-5	Talus	-.031
325-15	4C-5	Femur	-.081
3768-9	4C-6	Rad	-.085
517-9	4C-6	Rad	-.109
775-3	4C-5	Rad	-.111
517-6	4C-6	Humer	.015
1906-3	5A	Tibia	-.008
1316-14	5A	Calc	-.024
1907-1	5A	Scap	-.031
1321-2	5A	Mt	-.037
1333-1	5A	Femur	-.038
1321-4	5A	Talus	-.043
1904-1	5A	Mc	-.045
1905-15	5A	Tibia	-.046
1317-19	5A	Talus	-.060
1331-2	5A	Ulna	-.062
1906-7	5A	Mt	-.066
1320-1	5A	Talus	-.067
310-8	5A	Tibia	-.069
1316-4	5A	Femur	-.072
1331-9	5A	Talus	-.074
1339-10	5A	Talus	-.075
1322-1	5A	Rad	-.076
1321-3	5A	Tibia	-.076
1901-16	5A	Calc	-.080
1134-15	5A	Ulna	-.081
1327-11	5A	Tibia	-.084
1314-6	5A	Talus	-.090
1334-22	5A	Mt	-.095
1337-2	5A	Tibia	-.096
1905-14	5A	Talus	-.097
1908-4	5A	Rad	-.102
1901-13	5A	Humer	-.104
1908-21	5A	Femur	-.104
1908-6	5A	Talus	-.104
1338-7	5A	Humer	-.109
1327-15	5A	Humer	-.111

Table 5,21-8

1329-13	5A	Humer	-.117
1902-7	5A	Tibia	-.132
1316-13	5A	Talus	-.136
1338-3	5A	Rad	.042
1910-6	5C	Mt	-.016
320-16	5B-C	Talus	-.028
756-1	5C	Humer	-.029
791-11	5C	Talus	-.058
314-9	5C	Tibia	-.058
755-10	5C	Talus	-.058
1913-3	5C	Mc	-.066
1306-2	5C	Talus	-.066
1363-3	5A-B	Tibia	-.069
1343-22	5B	Talus	-.071
735-2	5B	Talus	-.072
1254-3	5B	Humer	-.072
758-1	5C	Rad	-.077
1357-8	5B	Talus	-.082
809-1	5B	Talus	-.082
710-1	5B	Femur	-.083
317-16	5B	Scap	-.085
863-2	5A-C	Humer	-.087
1352-3	5B	Rad	-.092
1306-3	5C	Calc	-.092
1352-6	5B	Talus	-.095
1344-1	5B	Femur	-.095
314-5	5C	Humer	-.099
702-2	5A-B	Talus	-.105
312-10	5B	Talus	-.109
1352-4	5B	Ulna	-.112
846-1	5-6	Ulna	-.034
782-3	5-6	Talus	-.066
846-2	5-6	Rad	-.070
766-9	5-6	Tibia	-.074
761-7	5-6	Humer	-.098
3769-5	6	Tibia	-.012
705-6	6A	Talus	-.021
3769-7	6	Talus	-.025
853-5	6A	Scap	-.035
3769-9	6	Tibia	-.035
745-33	6A	Talus	-.046
709-8	6A	Humer	-.053

Table 5.21-9

1916-42	6A	Talus	-.061
698-11	6A	Calc	-.066
1916-45	6A	Humer	-.069
1916-41	6A	Talus	-.071
1915-85	6A	Talus	-.071
1924-5	6A	Rad	-.074
1916-44	6A	Femur	-.078
1916-60	6A	Rad	-.079
698-16	6A	Mt	-.084
1915-59	6A	Tibia	-.086
3769-12	6	Calc	-.088
3769-13	6	Femur	-.090
1350-9	6A	Humer	-.104
1915-63	6A	Rad	-.108
731-15	6A	Tibia	.027
1925-2	6B	Humer	-.009
159-76	6B	Rad	-.016
1927-2	6B	Talus	-.017
1923-24	6B	Humer	-.022
159-52	6B	Humer	-.029
785-29	6B	Rad	-.030
3769-11	6B	Talus	-.034
1930-84	6B	Talus	-.038
159-5	6B	Talus	-.053
159-129	6B	Femur	-.056
1923-31	6B	Talus	-.067
1930-85	6B	Talus	-.079
159-4	6B	Talus	-.084
1914-13	6B	Mc	-.086
171-77	6B	Rad	-.088
171-78	6B	Rad	-.089
825-4	6B	Talus	-.090
159-209	6B	Scap	-.092
1932-15	6B	Femur	-.095
1930-66	6B	Humer	-.095
171-62	6B	Mc	-.095
785-27	6B	Humer	-.096
171-51	6B	Talus	-.097
1932-14	6B	Calc	-.098
159-293	6B	Humer	-.099
171-53	6B	Humer	-.101
159-7	6B	Calc	-.104

Table 5.21-10

159-6	6B	Talus	-.107
821-4	6B	Mt	-.112
746-3	6B	Calc	-.120
1930-51	6B	Rad	.004
159-86	6B	Rad	.023
1930-53	6B	Rad	.030
159-107	6B	Tibia	.035
1933-102	6-7	Humer	-.001
745-31	6-7	Talus	-.010
1931-14	6-7	Femur	-.019
747-7	6-7	Talus	-.052
1933-53	6-7	Rad	-.069
747-6	6-7	Scap	-.087
1933-82	6-7	Scap	-.092
1933-86	6-7	Scap	.014

TABLE 5.21: Log differences for dimensions of *Capra* sp. bones from Tepe Yahya and Tepe Gaz Tavīla-R37

Notes: for standard and measurement definitions see Table 5.20; data are plotted here in Figures 5.10, 5.11, 5.12; Scap = scapula BG, Humer = humerus BT, Rad = radius Bp or Bd, Ulna = ulna DPA, Mc = metacarpus Bp or Bd, Femur = femur DC, Tibia = tibia Dd, Talus = astragalus GLl, Calc = calcaneum GL, Mt = metatarsus Bp or Bd.

TABLE 5.22

ID Number	Period	Skeletal Part	Log difference
305-5	4C1	Humer	-.004
468-3	4C1	Humer	-.004
543-6	4C1	Humer	-.006
550-4	4C1	Humer	-.015
280-5	4C1	Rad	-.027
399-37	4C1	Talus	-.033
293-11	4C1	Mt	-.036
279-26	4C1	Rad	-.051
309-25	4C1	Femur	-.064
547-10	4C1	Talus	-.064
556-14	4C1	Rad	-.078
3767-37	4C1	Talus	-.089
547-3	4C1	Rad	-.090
279-22	4C1	Ulna	-.101
279-21	4C1	Rad	-.102
3767-36	4C1	Talus	-.126
545-3	4C1	Humer	.028
296-4	4C1	Scap	.073
3753-63	4C2	Scap	-.010
3721-4	4C2	Rad	-.012
3765-15	4C2	Talus	-.020
3745-21	4C2	Humer	-.023
3732-22	4C2	Tibia	-.025
3750-18	4C2	Femur	-.025
3745-18	4C2	Tibia	-.025
3755-14	4C2	Tibia	-.027
294-4	4C2	Humer	-.030
3745-13	4C2	Tibia	-.031
3732-12	4C2	Rad	-.032
290-1	4C2	Scap	-.033
3704-37	4C2	Rad	-.039
3750-34	4C2	Scap	-.041
3738-16	4C2	Rad	-.045
3750-20	4C2	Femur	-.048
3745-8	4C2	Rad	-.048
1304-4	4C2	Talus	-.048
3765-92	4C2	Tibia	-.048
466-10	4C2	Tibia	-.052
555-16	4C2	Tibia	-.052
3704-51	4C2	Femur	-.057
3738-19	4C2	Femur	-.059
3745-10	4C2	Rad	-.060

3722-6	4C2	Calc	-.067
3750-22	4C2	Femur	-.071
3752-18	4C2	Talus	-.072
3712-9	4C2	Ulna	-.074
3738-10	4C2	Humer	-.075
3742-6	4C2	Rad	-.081
3766-18	4C2	Calc	-.096
3745-6	4C2	Rad	-.163
3710-2	4C2	Humer	.003
3766-14	4C2	Tibia	.003
3710-3	4C2	Humer	.010
3766-19	4C2	Talus	.010
3712-5	4C2	Rad	.028
3712-20	4C2	Humer	.045
304-6	4C-5	Rad	-.032
304-8	4C-5	Femur	-.052
307-2	4C-5	Ulna	-.054
304-9	4C-5	Tibia	-.065
304-11	4C-5	Calc	-.091
304-5	4C-5	Rad	-.115
312-7	5B	Ulna	-.008
1367-1	5B	Calc	-.014
1339-2	5A	Humer	-.017
1348-7	5B	Femur	-.017
857-6	5C	Humer	-.018
1372-1	5C	Humer	-.024
1338-6	5A	Calc	-.024
1315-3	5A	Tibia	-.031
1323-4	5A	Ulna	-.033
1320-2	5A	Talus	-.045
801-5	5C	Talus	-.050
1326-1	5A	Talus	-.053
1343-26	5B	Calc	-.056
1320-3	5A	Ulna	-.057
774-9	5A-B	Talus	-.059
1317-16	5A	Mc	-.059
741-1	5B	Rad	-.061
1351-4	5B	Rad	-.063
1363-4	5A-B	Rad	-.066
716-17	5A-B	Femur	-.067
1906-6	5A	Humer	-.068
1338-2	5A	Tibia	-.069

Table 5.22-2

1343-27	5B	Scap	-.071
760-2	5C	Rad	-.083
1337-1	5A	Mt	-.091
759-1	5C	Humer	.027
761-8	5-6	Humer	-.030
722-15	5-6	Humer	.019
782-2	5-6	Humer	.028
851-10	6B	Talus	-.001
159-59	6B	Humer	-.004
3772-5	6	Ulna	-.005
167-13	6B	Talus	-.007
724-7	6A	Talus	-.008
159-291	6B	Ulna	-.016
1918-1	6A	Mt	-.017
159-122	6B	Femur	-.023
159-62	6B	Humer	-.023
159-84	6B	Rad	-.026
709-9	6A	Talus	-.029
1918-2	6A	Mc	-.034
785-28	6B	Talus	-.039
159-1	6B	Talus	-.041
1932-13	6B	Talus	-.042
159-68	6B	Humer	-.043
159-103	6B	Talus	-.048
3771-2	6	Talus	-.048
159-108	6B	Tibia	-.052
159-3	6B	Talus	-.055
1918-24	6A	Femur	-.057
159-101	6B	Calc	-.059
159-2	6B	Talus	-.064
159-60	6B	Humer	-.065
1914-10	6B	Talus	-.067
1915-47	6A	Mt	-.083
159-12	6B	Mt	-.087
3771-3	6	Humer	.000
1918-3	6A	Tibia	.015
159-75	6B	Rad	.017
1930-77	6B	Mc	.032
1923-23	6B	Mc	.054
1932-93	6B	Humer	.055
1915-143	6A	Scap	.056
849-13	6A	Humer	.072

Table 5.22-3

1933-66	6-7	Tibia	-.022
1933-71	6-7	Talus	-.023
719-19	6-7	Tibia	-.036
1933-72	6-7	Talus	-.038
1933-67	6-7	Talus	-.050
1933-68	6-7	Calc	-.071
704-3	6-7	Rad	.008
728-5	6-7	Scap	.010
1934-15	6-7	Tibia	.033
1933-60	6-7	Rad	.04[illegible]
1933-88	6-7	Scap	.056
1931-13	6-7	Scap	.092
161-66	7A	Talus	-.004
2122-5	7C	Humer	-.004
170-10	7A	Scap	-.008
207-2	7B	Talus	-.014
180-28	7D	Humer	-.015
214-23	7B	Talus	-.018
878-2	7B	Talus	-.023
193-1	7B	Talus	-.023
2108-33	7B	Humer	-.026
836-1	7C	Humer	-.027
852-3	7C	Talus	-.027
877-6	7B	Scap	-.031
180-23	7D	Talus	-.032
2109-4	7B	Calc	-.035
2115-57	7B	Tibia	-.039
2112-45	7B	Mc	-.039
180-51	7D	Femur	-.043
737-3	7A	Mt	-.043
194-9	7B	Rad	-.044
2111-29	7B	Talus	-.048
2109-10	7B	Scap	-.050
170-13	7A	Rad	-.052
203-9	7B	Scap	-.057
180-26	7D	Humer	-.062
877-5	7B	Ulna	-.068
161-67	7A	Talus	-.069
2307-65	7B	Calc	-.079
214-22	7B	Talus	-.081
170-7	7A	Talus	-.084
206-12	7B	Ulna	-.095

Table 5.22=4

161-48	7A	Rad	-.102
206-13	7B	Ulna	.005
1375-10	7A	Humer	.022
2115-30	7B	Scap	.030
193-3	7B	Humer	.049
837-6	7A	Humer	.085
3542-9	R37	Tibia	-.003
3558-20	R37	Tibia	-.029
3561-20	R37	Tibia	-.039
3562-12	R37	Talus	-.071
3568-2	R37	Rad	-.148
3563-62	R37	Scap	.000
3560-39	R37	Scap	.004
3507-1	R37	Scap	.004
3563-58	R37	Scap	.010
3569-21	R37	Scap	.030
3525-23	R37	Scap	.036
3573-18	R37	Rad	.043

TABLE 5.22: Log differences for dimensions of *Ovis* sp. bones from Tepe Yahya and Tepe Gaz Tavīla-R37

Notes: for standard and measurement definitions see Table 5.20; data are plotted here in Figures 5.13, 5.14, 5.15, 5.16; Scap = scapula BG, Humer = humerus BT, Rad = radius Bp or Bd, Ulna = ulna DPA, Mc = metacarpus Bp or Bd, Femur = femur DC, Tibia = tibia Bd, Talus = astragalus GLl, Calc = calcaneum GL, Mt = metatarsus Bp or Bd.

TABLE 5.23

Sex and age data for Cattle (*Bos* sp.) pelves from Tepe Yahya, south side, periods VII-IVC and Tepe Gaz Tavila-R37

	Male			Female			Sex N.D.		
	yng.	not yng.	age n.d.	yng.	not yng.	age n.d.	yng.	not yng.	age n.d.
Gaz Tavila-R37	0	0	0	0	0	0	0	3	1
% not young = 100.0									
Yahya VII	0	0	0	0	7	0	4	5	6
% not young = 75.0									
Yahya VI (including VII-VI)	0	2	1	0	1	0	1	5	12
% not young = 88.9									
Yahya V (including VI-V)	0	2	1	0	3	0	0	2	4
% not young = 100.0									
Yahya IVC	0	0	0	0	0	1	0	1	5
% not young = 100.0									

Notes: yng. = young = acetabulum area not fused or other signs of age less than about 10 months;
not yng. = not young = acetabulum area fused or other signs of age greater than about 10 months;
age n.d. = age not determined.

TABLE 5.24

Sex, age, and identification data
for Caprine (*Ovis* + *Capra* + O/C) pelves from
Tepe Yahya, south side, periods VII-IVC and Tepe Gaz Tavila-R37

ID	Male yng.	Male not yng.	Male age n.d.	Female yng.	Female not yng.	Female age n.d.	Sex N.D. yng.	Sex N.D. not yng.	Sex N.D. age n.d.
Gaz Tavila-R37									
Ovis	0	0	0	0	2	1	0	0	0
Capra	0	1	0	0	2	2	1	0	0
O/C	1	1	3	0	3	0	8	10	14
Total	1	2	3	0	7	3	9	10	14
O:C = 1:2.00; % not young = 65.5; M:F = 1:1.67									
Yahya VII									
Ovis	0	0	0	0	7	3	0	0	0
Capra	0	1	1	1	12	6	1	0	2
O/C	0	0	0	0	5	2	7	5	22
Total	0	1	1	1	24	11	8	5	24
O:C = 1:2.40; % not young = 76.9; M:F = 1:18.0									
Yahya VI (including VII-VI)									
Ovis	0	0	0	0	0	4	0	1	0
Capra	0	2	0	0	2	2	1	0	1
O/C	0	0	1	0	3	3	1	3	9
Total	0	2	1	0	5	9	2	4	10
O:C = 1:1.60; % not young = 84.6; M:F = 1:4.67									
Yahya V									
Ovis	0	1	0	0	3	1	0	0	0
Capra	0	2	0	1	3	1	0	0	0
O/C	0	0	0	0	1	1	5	1	5
Total	0	3	0	1	7	3	5	1	5
O:C = 1:1.40; % not young = 64.7; M:F = 1:3.67									
Yahya IVC.2									
Ovis	0	0	1	0	1	0	1	3	1
Capra	0	1	0	0	5	3	0	2	0
O/C	1	0	3	0	3	2	5	9	10
Total	1	1	4	0	9	5	6	14	11
O:C = 1:1.57; % not young = 77.4; M:F = 1:2.33									
Yahya IVC.1									
Ovis	0	2	2	0	2	1	0	0	0
Capra	0	0	1	1	4	1	0	1	2
O/C	0	0	2	0	8	1	2	5	10
Total	0	2	5	1	14	3	2	6	12
O:C = 1:1.43; % not young = 88.0; M:F = 1:2.57									

Notes: yng. = young = acetabulum area not fused or other signs of age less than about 8 months;
not yng. = not young = acetabulum area fused or other signs of age greater than about 8 months;
age n.d. = age not determined; O:C = ratio of *Ovis* to *Capra*.

TABLE 5.25

Fusion scores and state of epiphyseal union for Cattle (Bos sp.) remains from Tepe Yahya, south side, periods VII-IVC and Tepe Gaz Tavila-R37

sk.pt.	R37	Yahya: VII	VI	V	IVC
STAGE I; age range: 7-10 months					
dS	100*	0*	100*	100*	100*
	(1-0-0)	(0-0-1)	(1-0-0)	(1-0-0)	(2-0-0)
Ac	100	90	100	100	100
	(3-0-0)	(13-1-1)	(6-0-0)	(6-0-0)	(1-0-0)
Total	100	84	100	100	100
STAGE II; age range: 12-20 months					
pR	--	87	100	100	100
		(7-0-1)	(10-0-0)	(1-0-0)	(2-0-0)
dH	50	100	83	--	100
	(0-1-0)	(9-0-0)	(7-1-1)		(6-0-0)
Total	50	94	92	100	100
STAGE III; age range: 15-24 months					
P2	50	91	100	94	100
	(1-1-1)	(14-1-1)	(23-0-0)	(16-0-1)	(6-0-0)
P1	--	100	97	100	100
		(14-0-0)	(29-0-1)	(23-0-0)	(3-0-0)
Total	50	95	98	98	100
STAGE IV; age range: 24-36 months					
dT	0	40	100	100	100
	(0-0-1)	(2-0-3)	(8-0-0)	(1-0-0)	(4-0-0)
dMp	67	57	80	100	100
	(2-0-1)	(12-0-9)	(18-1-4)	(4-0-0)	(1-0-0)
Ca	0	50	50	100	100
	(0-0-1)	(3-0-3)	(5-0-5)	(2-0-0)	(2-0-0)
Total	40	53	76	100	100

TABLE 5.25 (continued)

sk.pt.	R37	Yahya: VII	VI	V	IVC
STAGE V; age range: 42-48 months					
pF	--	25 (2-0-6)	56 (5-0-4)	--	75 (3-0-1)
pU	--	25 (0-1-1)	100 (1-0-0)	--	--
pH	--	--	0 (0-0-1)	--	--
dR	33 (1-0-2)	80 (4-0-1)	50 (1-0-1)	--	100 (1-0-0)
dF	--	38 (1-1-2)	0 (0-0-1)	--	--
pT	--	50 (1-0-1)	50 (1-0-1)	--	100 (2-0-0)
Total	33	43	50	--	86
Total specimens:	16	116	136	55	34

Notes: * : fusion score = 100(#FU + .5(#EL)) / (#FU + #EL #UF);
(#-#-#): (#**FU**sed - #**E**piphyseal **L**ine - #**U**n**F**used);
Total : fusion score for skeletal parts combined;
sk.pt. = skeletal part:
dS = distal Scapula, Ac = Acetabulum, pR = proximal Radius,
dH = distal Humerus, P2 = Phalanx 2, P1 = Phalanx 1,
dT = distal Tibia, dMp = distal Metapodial, Ca = Calcaneum,
pF = proximal Femur, pU = proximal Ulna, pH = proximal Humerus,
dR = distal Radius, dF = distal Femur, pT = proximal Tibia;
age ranges from Grigson (1982: appendix 3).

TABLE 5.26

Definition of age stages for Cattle (<u>Bos</u> sp.) based on the eruption and wear of mandibular and maxillary teeth

stage	months		Wear: D3orP3	P4	M1	M2	M3
A	0-4	mandibular	DU	--	--	--	--
	0-4	maxillary	DU	--	--	--	--
B	5-9	mandibular	DS	--	U	--	--
	5-9	maxillary	DS	--	U	--	--
C	8-18	mandibular	DW	--	S	U	--
	8-18	maxillary	DW	--	S	U	--
D	17-24	mandibular	DW	--	M	S	--
	17-24	maxillary	DW	--	M	S	--
E	24-30	mandibular	U	--	M	S	U
	24-30	maxillary	U/S	U/S	M	S	U
F	30-42	mandibular	S	U/S	M	M	S
	30-54	maxillary	S	S	M	M	S
G	42-78	mandibular	M	S/M	M	M	M
	48-84	maxillary	M	M	M	M	M
H	78-138	mandibular	M	M	H	M	M
	78-138	maxillary	M	M	H	M	M
I	138+	mandibular	M/H	M/H	H	H	M
	138+	maxillary	M/H	M/H	H	H	M
J	138+	mandibular	H	H	H	H	H
	138+	maxillary	H	H	H	H	H

Notes: for wear abbreviations, see Appendix 1;
ages in months are those documented by Higham (1967) for stages A-F and by Ducos (1968) for stages G-I in mandibles and F-I in maxilla; see also Grigson (1982).

TABLE 5.27

Allocation of mandibles and maxillaries and teeth of Cattle (Bos sp.) to age stages defined in Table 5.26: Tepe Yahya, south side, periods VII-IVC

period:	VII mand.	VII max.	VI mand.	VI max.	V-IVC mand.	V-IVC max.	total* mand.	total* max.
Allocations (from Figure 5.18)								
stage								
A	0	0	0	0	1.00	0	1.00	0
B	0.33	0	1.25	1.00	1.00	1.11	2.58	2.11
C	2.16	5.05	1.38	2.50	1.00	0.44	5.16	7.99
D	3.16	8.99	1.08	2.53	0.17	1.49	5.03	14.02
E	2.50	12.74	4.58	3.03	2.17	2.99	9.37	21.27
F	7.17	5.07	5.93	6.28	5.42	3.91	20.47	17.77
G	2.84	5.32	4.26	4.28	4.09	2.24	13.64	12.35
H	4.17	3.07	5.09	4.11	3.09	1.99	14.31	9.68
I	2.17	2.62	2.39	2.41	2.09	1.69	6.78	6.73
J	0.50	1.13	2.06	0.83	1.00	1.11	3.69	3.07
TOTAL	25	44	28	27	21	17	82	95
percentage of total within								
stage	%	%	%	%	%	%	%	%
A	0	0	0	0	4.8	0	1.2	0
B	1.3	0	4.5	3.7	4.8	6.5	3.1	2.2
C	8.6	11.5	4.9	9.3	4.8	2.6	6.3	8.4
D	12.6	20.4	3.8	9.4	0.8	8.8	6.1	14.8
E	10.0	29.0	16.4	11.2	10.3	17.6	11.4	22.4
F	28.7	11.5	21.2	23.3	25.8	23.0	25.0	18.7
G	11.4	12.1	15.2	15.9	19.5	13.2	16.6	13.0
H	16.7	7.0	18.2	15.2	14.7	11.7	17.4	10.2
I	8.7	6.0	8.5	8.9	9.9	10.0	8.3	7.1
J	2.0	2.6	7.3	3.1	4.8	6.5	4.5	3.2
percentage of total older than								
stage	%	%	%	%	%	%	%	%
A	100.0	100.0	100.0	100.0	95.3	100.0	98.7	100.0
B	98.7	100.0	95.5	96.3	90.5	93.5	95.6	97.8
C	90.0	88.5	90.6	87.0	85.8	90.9	89.3	89.4
D	77.4	68.1	86.8	77.6	85.0	82.1	83.2	74.6
E	67.4	39.1	70.4	66.4	74.7	64.5	71.8	52.2
F	38.7	27.6	49.2	43.1	48.9	41.4	46.8	33.5
G	27.4	15.5	34.0	27.3	29.4	28.2	30.2	20.5
H	10.7	8.5	15.9	12.0	14.7	16.5	12.8	10.3
I	2.0	2.6	7.3	3.1	4.8	6.5	4.5	3.2
J	0	0	0	0	0	0	0	0

* : totals include additional specimens from mixed deposits.

TABLE 5.28

Fusion scores and state of epiphyseal union for Caprine (<u>Ovis</u> + <u>Capra</u> + O/C) remains from Tepe Yahya, south side, periods VII-IVC and Tepe Gaz Tavila-R37

sk.pt.	R37	Yahya: VII	VI	V	IVC.2	IVC.1
STAGE I; age range: 6-8 months						
dS	87*	73*	100*	100*	78*	93*
	(21-0-3)	(33-0-9)	(13-0-0)	(4-0-0)	(7-0-2)	(14-0-1)
Ac	100	93	89	85	91	90
	(12-0-0)	(26-0-2)	(12-1-1)	(11-0-2)	(20-0-2)	(18-0-2)
Total	92	84	94	88	87 --89--	91
STAGE II; age range: 8-10 months						
pR	92	80	93	100	97	95
	(13-0-1)	(32-0-8)	(25-0-2)	(16-0-0)	(27-2-0)	(19-0-1)
dH	75	84	95	96	86	76
	(8-2-2)	(52-3-9)	(41-0-2)	(27-0-1)	(38-3-5)	(27-5-7)
Total	85	82	94	98	90 --86--	82
STAGE III; age range: 13-16 months						
P2	--	75	90	100	93	100
		(6-0-2)	(4-1-0)	(4-0-0)	(20-1-1)	(7-0-0)
P1	67	46	62	91	83	93
	(4-0-2)	(6-1-7)	(5-0-3)	(10-0-1)	(15-0-3)	(21-1-1)
Total	67	57	73	93	89 --92--	95
STAGE IV; age range: 18-24 months						
dT	71	52	85	85	83	85
	(12-0-5)	(13-1-12)	(19-1-3)	(14-1-2)	(30-3-5)	(16-0-3)
dMc	22	37	100	50	62	44
	(1-0-7)	(3-0-5)	(8-0-0)	(2-0-2)	(5-0-3)	(3-1-4)
Total	52	49	89	79	79 --76--	72
STAGE V; age range: 20-30 months						
dMt	33	65	90	40	64	50
	(1-0-2)	(8-1-4)	(4-1-0)	(2-0-3)	(6-2-3)	(1-1-1)
pU	100	20	25	67	67	50
	(1-0-0)	(2-0-8)	(1-0-3)	(4-0-2)	(4-0-2)	(3-0-3)
Total	50	46	61	55	65 --60--	50

TABLE 5.28 (continued)

sk.pt.	R37	Yahya: VII	VI	V	IVC.2	IVC.1
STAGE VI; age range: 30-36 months						
Ca	0	50	75	50	90	48
	(0-0-2)	(5-0-5)	(12-0-4)	(6-0-6)	(9-0-1)	(10-0-11)
pF	33	37	79	47	44	60
	(3-0-6)	(8-1-14)	(11-0-3)	(9-0-10)	(19-2-24)	(15-0-10)
dR	28	33	50	36	46	45
	(2-1-6)	(8-0-16)	(5-0-5)	(4-0-7)	(10-1-12)	(9-1-10)
Total	28	38	70	45	51 --51--	52
STAGE VII; age range: 36-42 months						
pH	25	25	75	40	50	61
	(0-1-1)	(1-0-3)	(4-1-1)	(2-0-3)	(4-1-4)	(5-1-3)
dF	33	50	54	73	33	25
	(1-0-2)	(7-1-7)	(7-0-6)	(8-0-3)	(5-3-12)	(3-1-10)
pT	0	86	50	75	78	57
	(0-0-4)	(6-0-1)	(1-0-1)	(7-1-2)	(15-1-4)	(7-2-5)
Total	17	56	60	67	54 --51--	46
Total specimens:	126	336	211	176	336	263

Notes: * : fusion score = 100(#FU + .5(#EL)) / (#FU + #EL #UF);
(#-#-#): (#**FU**sed - #**E**piphyseal **L**ine - #**U**n**F**used);
Total : fusion score for skeletal parts combined;
--##-- : fusion score for IVC.2 and IVC.1 combined;
sk.pt. = steletal part:
dS = distal Scapula, Ac = Acetabulum, pR = proximal Radius,
dH = distal Humerus, P2 = Phalanx 2, P1 = Phalanx 1,
dT = distal Tibia, dMc = distal Metacarpal,
dMt = distal Metatarsal, pU = proximal Ulna, Ca = Calcaneum,
pF = proximal Femur, dR = distal Radius, pH = proximal Humerus,
dF = distal Femur, pT = proximal Tibia;
age ranges from Silver (1969: table A for sheep).

TABLE 5.29

Definition of age stages for Caprines (*Ovis* + *Capra* + O-C) based on the eruption and wear of mandibular teeth

stage	months		D3orP3	P4	M1	M2	M3
A	0-2	wear	**DU**	--	--	--	--
		age range	0-2				
B	1-6	wear	**DW**(D1-5)	--	**U**	--	--
	(2-5)	age range	2-12		1-6		
C	5-16	wear	D5-DX	--	**S1-8**	**U**/S1	--
	(5-15)	max.crn.ht.	--		31+	--	
		min.crn.ht.	--		22.5	--	
		age range	4-24	--	5-18	1-16	
D	14-30	wear	D6-DX or	U	M1	**S1-6**	**U**
	(15-27)	max.crn.ht.	--	--	25.5	37.0+	--
		min.crn.ht.	--	--	18.0	31.0	--
		age range	4-	-32	14-48	10-36	1-30
E	24-42	wear	U/S/M	U4/S/M/H1	M1-2	S5-8/M1	**S1-3**
	(27-39)	max.crn.ht.	--	--	20.5	34.8	43+
		min.crn.ht.	--	--	11.6	24.4	34.1
		age range	--	22-66	30-60	18-42	24-42
F	36-72	wear	M	M/H1	M1-3/H1-3	M1	**S4-8**
	(39-60)	max.crn.ht.	--	--	17.0	29.8	39.0
		min.crn.ht.	--	--	6.8	16.0	25.3
		age range	--	26-66	30-78	26--	36-72
G	48-96	wear	M/H/V	H1/V1	H3/V1	**M1**	**M1**
	(60-78)	max.crn.ht.	--	--	10.7	24.7	32.2
		min.crn.ht.	--	--	3.3	9.5	17.7
		age range	--	32-120	48-78	--96	48--
H	60-108	wear	V	V1-2	V1-2	**M2-H/V1**	**M1**
	(78-93)	max.crn.ht.	--	--	5.0	13.5	23.0
		min.crn.ht.	--	--	2.0	3.0	8.0
		age range	--	54-120	48-120	60-108	--120
I	78-120	wear	V	V1-2	V1-2	V1-2	**M2-H/V**
	(93-120)	max.crn.ht.	--	--	4.5	6.8	11.8
		min.crn.ht.	--	--	0.8	2.0	6.0
		age range	--	54-120	48-120	66-120	78-120

TABLE 5.29 (continued)

Notes: for wear abbreviations, see Appendix 1;
crown heights (crn.ht.) are least enamel heights in mm. taken on lingual side of tooth between the tip of the "root valley" and the base of "cusp valley" (oral valleys in M3);
ages in months are those documented by Deniz and Payne (1982) for modern Turkish domestic goats; ranges in ( ) are used for plotting Figures 6.8 and 6.9;
stages defined as in Payne (1973: 293); basis for definition here in **bold.**

TABLE 5.30

Allocation of mandibles and mandibular teeth of Caprines (Ovis + Capra + O-C) to age stages defined in Table 5.29: Tepe Yahya, south side, periods VII-IVC and Tepe Gaz Tavila-R37

period:	R37	Yahya: VIIE-C	VIIB	VIIA	VIIB-A	VII-TOTAL
Allocations (from Figures 5.26-5.27)						
stage						
A	1.25	0	0.25	0	0	0.25
B	4.25	1.00	7.92	0	0.33	9.25
C	16.06	4.83	25.06	5.33	0.83	36.05
D	21.06	5.17	20.14	3.08	1.83	30.22
E	28.04	6.23	21.99	5.75	3.67	37.64
F	12.04	6.40	19.99	13.42	5.50	45.31
G	10.21	4.07	15.33	6.42	6.00	31.82
H	5.21	5.90	3.91	3.50	1.67	14.98
I	2.88	1.40	6.41	5.50	0.17	13.48
TOTAL	101	35	121	43	20	219
percentage of total within						
stage	%	%	%	%	%	%
A	1.2	0	0.2	0	0	0.1
B	4.2	2.9	6.5	0	1.7	4.2
C	15.9	13.8	20.7	12.4	4.2	16.5
D	20.9	14.8	16.6	7.2	9.2	13.8
E	27.8	17.8	18.2	13.4	18.4	17.2
F	11.9	18.3	16.5	31.2	27.5	20.7
G	10.1	11.6	12.7	14.9	30.0	14.5
H	5.2	16.9	3.2	8.1	8.4	6.8
I	2.9	4.0	5.3	12.8	0.9	6.2
percentage of total older than						
stage	%	%	%	%	%	%
A	98.9	100.0	99.7	100.0	100.0	99.9
B	94.7	97.2	93.2	100.0	98.6	95.7
C	78.8	83.4	72.5	87.6	94.4	79.2
D	57.9	68.6	55.9	80.4	85.2	65.4
E	30.1	50.8	37.7	67.0	66.8	48.2
F	18.2	32.5	21.2	35.8	39.3	27.5
G	8.1	20.9	8.5	20.9	9.3	13.0
H	2.9	4.0	5.3	12.8	0.9	6.2
I	0	0	0	0	0	0

TABLE 5.30 (continued)

Yahya: period:	VIB	VIA	VI-TOT	V-TOT	IVC.2	IVC.1	IVC-TOT
Allocations (from Figures 5.28-5.29)							
stage							
A	0.25	0.25	0.50	0.25	1.50	0.25	1.75
B	3.92	0.25	4.17	2.25	6.50	1.25	7.75
C	11.25	0.89	12.14	1.75	13.50	5.25	18.75
D	14.92	17.39	32.31	5.67	6.33	6.00	12.33
E	15.17	22.59	37.76	20.70	10.57	8.85	19.42
F	15.84	13.09	28.93	17.20	6.90	3.35	10.25
G	16.67	7.76	24.43	16.53	9.73	6.52	16.25
H	11.00	6.26	17.26	10.11	3.23	3.27	6.50
I	5.00	3.51	8.51	3.53	4.73	4.27	9.00
TOTAL	94	72	166	78	63	39	102
percentage of total within							
stage	%	%	%	%	%	%	%
A	0.3	0.3	0.3	0.3	2.4	0.6	1.7
B	4.2	0.3	2.5	2.9	10.3	3.2	7.6
C	12.0	1.2	7.3	2.2	21.4	13.5	18.4
D	15.9	24.2	19.5	7.3	10.0	15.4	12.1
E	16.1	31.4	22.7	26.5	16.8	22.7	19.0
F	16.9	18.2	17.4	22.1	11.0	8.6	10.0
G	17.7	10.8	14.7	21.2	15.4	16.7	15.9
H	11.7	8.7	10.4	13.0	5.1	8.4	6.4
I	5.3	4.9	5.1	4.5	7.5	10.9	8.8
percentage of total older than							
stage	%	%	%	%	%	%	%
A	99.8	99.7	99.6	99.7	97.5	99.4	98.2
B	95.6	99.4	97.1	96.8	87.2	96.2	90.6
C	83.6	98.2	89.8	94.6	65.8	82.7	72.2
D	67.7	74.0	70.3	87.3	55.8	67.3	60.1
E	51.6	42.6	47.6	60.8	39.0	44.6	41.1
F	34.7	24.4	30.2	38.7	28.0	36.0	31.1
G	17.0	13.6	15.5	17.5	12.6	19.3	15.2
H	5.3	4.9	5.1	4.5	7.5	10.9	8.8
I	0	0	0	0	0	0	0

TABLES 7.1-7.12

"Count-Weight," "Species," and "Modification" Tables

NOTES

See Chapter 7, Section 7.2 for discussion of the arrangement of these tables and of abbreviations employed.

Each Table is printed on 10 sheets lettered A through J. They fit together in the following manner:

A	B	C	D	E
F	G	H	I	J

Gaz Tavila Context:	Phase: Class:	Natural Count	Weight	Index	6E Count	Weight	Index	6D Count	Weight	Index
RUBBLE	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0
WALLS	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0
OCCUPATION IN	total	0	0.0	0.0	0	0.0	0.0	12	124.0	10.3
	med.mammal			0.0			0.0	9	14.5	1.6
	lg.mammal			0.0			0.0	3	109.5	36.5
	other			0.0			0.0	0	0.0	0.0
OCCUPATION OUT & ASSOCIATED	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0
OCCUPATION & FILL IN	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0
OCCUPATION & FILL OUT & ASSOCIATED	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0

TABLE 7.1-A

TABLE 7.1-B

6D-C Count	Weight	Index	6C Count	Weight	Index	6A Count	Weight	Index	6-5 Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	12	18.5	1.5
		0.0			0.0			0.0	10	11.5	1.2
		0.0			0.0			0.0	2	7.0	3.5
		0.0			0.0			0.0	0	0.0	0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	32	107.5	3.4	0	0.0	0.0	0	0.0	0.0
		0.0	24	64.0	2.7			0.0			0.0
		0.0	6	41.5	6.9			0.0			0.0
		0.0	2	2.0	1.0			0.0			0.0

5			6-4			5-4			4		
Count	Weight	Index	Count	Weight	Index	Count	Weight	Index	Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
90	301.0	3.3	0	0.0	0.0	0	0.0	0.0	110	291.5	2.7
86	286.5	3.3			0.0			0.0	94	188.5	2.0
4	14.5	3.6			0.0			0.0	4	91.5	22.9
0	0.0	0.0			0.0			0.0	12	11.5	1.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	156	808.0	5.2
		0.0			0.0			0.0	145	483.0	3.3
		0.0			0.0			0.0	11	325.0	29.5
		0.0			0.0			0.0	0	0.0	0.0
20	64.0	3.2	0	0.0	0.0	0	0.0	0.0	131	353.5	2.7
19	57.0	3.0			0.0			0.0	116	261.5	2.3
1	7.0	7.0			0.0			0.0	15	87.0	5.8
0	0.0	0.0			0.0			0.0	0	5.0	0.0
398	2167.5	5.4	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
349	952.5	2.7			0.0			0.0			0.0
39	1201.5	30.8			0.0			0.0			0.0
10	13.5	1.4			0.0			0.0			0.0

TABLE 7.1-C

5-3 Count	5-3 Weight	5-3 Index	4-3 Count	4-3 Weight	4-3 Index	3 Count	3 Weight	3 Index	6-2 Count	6-2 Weight	6-2 Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
132	799.0	6.1	0	0.0	0.0	102	335.5	3.3	0	0.0	0.0
111	316.5	2.9			0.0	93	242.0	2.6			0.0
21	429.5	20.5			0.0	9	86.0	9.6			0.0
0	53.0	0.0			0.0	0	7.5	0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0

TABLE 7.1-D

2 Count	Weight	Index	2-1 Count	Weight	Index	1 Count	Weight	Index	Total Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0	0	0.0	0.0
		0.0			0.0			0.0	0	0.0	0.0
		0.0			0.0			0.0	0	0.0	0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	12	18.5	1.5
		0.0			0.0			0.0	10	11.5	1.2
		0.0			0.0			0.0	2	7.0	3.5
		0.0			0.0			0.0	0	0.0	0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	212	716.5	3.4
		0.0			0.0			0.0	189	489.5	2.6
		0.0			0.0			0.0	11	215.5	19.6
		0.0			0.0			0.0	12	11.5	1.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	390	1942.5	5.0
		0.0			0.0			0.0	349	1041.5	3.0
		0.0			0.0			0.0	41	840.5	20.5
		0.0			0.0			0.0	0	60.5	0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	151	417.5	2.8
		0.0			0.0			0.0	135	318.5	2.4
		0.0			0.0			0.0	16	94.0	5.9
		0.0			0.0			0.0	0	5.0	0.0
18	60.0	3.3	0	0.0	0.0	59	157.0	2.7	507	2492.0	4.9
17	56.0	3.3			0.0	55	133.0	2.4	445	1205.5	2.7
1	4.0	4.0			0.0	4	23.0	5.8	50	1270.0	25.4
0	0.0	0.0			0.0	0	1.0	0.0	12	16.5	1.4

TABLE 7.1-E

TABLE 7.1-F

Gaz Tavila	Phase:	Natural			6E			6D		
Context:	Class:	Count	Weight	Index	Count	Weight	Index	Count	Weight	Index
MIDDEN	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0
ROOM FILL IN & ASSOCIATED	total	0	0.0	0.0	185	512.0	2.8	10	59.5	6.0
	med.mammal			0.0	158	335.0	2.1	7	9.0	1.3
	lg.mammal			0.0	21	168.0	8.0	3	50.5	16.8
	other			0.0	6	9.0	1.5	0	0.0	0.0
UNDIFFER-ENTIATED FILL OUT	total	514	1651.5	3.2	0	0.0	0.0	20	68.0	3.4
	med.mammal	456	940.0	2.1			0.0	15	25.0	1.7
	lg.mammal	52	641.5	12.3			0.0	5	31.5	6.3
	other	6	70.0	11.7			0.0	0	11.5	0.0
PLATFORM OR LEVELING	total	0	0.0	0.0	0	0.0	0.0	60	196.5	3.3
	med.mammal			0.0			0.0	56	178.5	3.2
	lg.mammal			0.0			0.0	4	18.0	4.5
	other			0.0			0.0	0	0.0	0.0
MIXED OR OTHER	total	0	0.0	0.0	100	163.0	1.6	0	0.0	0.0
	med.mammal			0.0	97	146.0	1.5			0.0
	lg.mammal			0.0	3	17.0	5.7			0.0
	other			0.0	0	0.0	0.0			0.0
TOTAL	total	514	1651.5	3.2	285	675.0	2.4	102	448.0	4.4
	med.mammal	456	940.0	2.1	255	481.0	1.9	87	227.0	2.6
	lg.mammal	52	641.5	12.3	24	185.0	7.7	15	209.5	14.0
	other	6	70.0	11.7	6	9.0	1.5	0	11.5	0.0

6D-C Count	Weight	Index	6C Count	Weight	Index	6A Count	Weight	Index	6-5 Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
36	119.0	3.3	26	69.5	2.7	0	0.0	0.0	2	1.5	0.8
28	67.0	2.4	25	55.5	2.2			0.0	2	1.5	0.8
8	46.5	5.8	1	14.0	14.0			0.0	0	0.0	0.0
0	5.5	0.0	0	0.0	0.0			0.0	0	0.0	0.0
11	91.5	8.3	87	799.0	9.2	0	0.0	0.0	0	0.0	0.0
4	5.5	1.4	73	270.0	3.7			0.0			0.0
7	86.0	12.3	14	459.0	32.8			0.0			0.0
0	0.0	0.0	0	70.0	0.0			0.0			0.0
14	32.0	2.3	0	0.0	0.0	22	89.0	4.0	0	0.0	0.0
13	31.5	2.4			0.0	19	47.0	2.5			0.0
0	0.0	0.0			0.0	3	42.0	14.0			0.0
1	0.5	0.5			0.0	0	0.0	0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
61	242.5	4.0	145	976.0	6.7	22	89.0	4.0	14	20.0	1.4
45	104.0	2.3	122	389.5	3.2	19	47.0	2.5	12	13.0	1.1
15	132.5	8.8	21	514.5	24.5	3	42.0	14.0	2	7.0	3.5
1	6.0	6.0	2	72.0	36.0	0	0.0	0.0	0	0.0	0.0

TABLE 7.1-G

5			6-4			5-4			4		
Count	Weight	Index	Count	Weight	Index	Count	Weight	Index	Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
40	226.5	5.7	0	0.0	0.0	8	18.0	2.3	0	0.0	0.0
36	56.5	1.6			0.0	7	17.5	2.5			0.0
3	155.5	51.8			0.0	0	0.0	0.0			0.0
1	14.5	14.5			0.0	1	0.5	0.5			0.0
44	78.5	1.8	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
44	53.5	1.2			0.0			0.0			0.0
0	17.0	0.0			0.0			0.0			0.0
0	8.0	0.0			0.0			0.0			0.0
4	13.0	3.3	0	0.0	0.0	0	0.0	0.0	12	49.5	4.1
4	13.0	3.3			0.0			0.0	11	27.5	2.5
0	0.0	0.0			0.0			0.0	1	22.0	22.0
0	0.0	0.0			0.0			0.0	0	0.0	0.0
0	0.0	0.0	49	110.0	2.2	0	0.0	0.0	0	0.0	0.0
		0.0	46	100.5	2.2			0.0			0.0
		0.0	3	8.0	2.7			0.0			0.0
		0.0	0	1.5	0.0			0.0			0.0
596	2850.5	4.8	49	110.0	2.2	8	18.0	2.3	409	1502.5	3.7
538	1419.0	2.6	46	100.5	2.2	7	17.5	2.5	366	960.5	2.6
47	1395.5	29.7	3	8.0	2.7	0	0.0	0.0	31	525.5	17.0
11	36.0	3.3	0	1.5	0.0	1	0.5	0.5	12	16.5	1.4

TABLE 7.1-H

5-3 Count	Weight	Index	4-3 Count	Weight	Index	3 Count	Weight	Index	6-2 Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	42	150.5	3.6	0	0.0	0.0	0	0.0	0.0
		0.0	40	114.5	2.9			0.0			0.0
		0.0	2	36.0	18.0			0.0			0.0
		0.0	0	0.0	0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	60	233.5	3.9
		0.0			0.0			0.0	57	194.5	3.4
		0.0			0.0			0.0	3	30.5	10.2
		0.0			0.0			0.0	0	8.5	0.0
132	799.0	6.1	42	150.5	3.6	102	335.5	3.3	60	233.5	3.9
111	316.5	2.9	40	114.5	2.9	93	242.0	2.6	57	194.5	3.4
21	429.5	20.5	2	36.0	18.0	9	86.0	9.6	3	30.5	10.2
0	53.0	0.0	0	0.0	0.0	0	7.5	0.0	0	8.5	0.0

TABLE 7.1-I

2 Count	2 Weight	2 Index	2-1 Count	2-1 Weight	2-1 Index	1 Count	1 Weight	1 Index	Total Count	Total Weight	Total Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0	0	0.0	0.0
		0.0			0.0			0.0	0	0.0	0.0
		0.0			0.0			0.0	0	0.0	0.0
105	280.5	2.7	95	382.0	4.0	0	0.0	0.0	549	1819.0	3.3
95	239.0	2.5	86	317.5	3.7			0.0	484	1213.0	2.5
7	30.5	4.4	9	62.0	6.9			0.0	54	563.0	10.4
3	11.0	3.7	0	2.5	0.0			0.0	11	43.0	3.9
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	676	2688.5	4.0
		0.0			0.0			0.0	592	1294.0	2.2
		0.0			0.0			0.0	78	1235.0	15.8
		0.0			0.0			0.0	6	159.5	26.6
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	112	380.0	3.4
		0.0			0.0			0.0	103	297.5	2.9
		0.0			0.0			0.0	8	82.0	10.3
		0.0			0.0			0.0	1	0.5	0.5
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	209	506.5	2.4
		0.0			0.0			0.0	200	441.0	2.2
		0.0			0.0			0.0	9	55.5	6.2
		0.0			0.0			0.0	0	10.0	0.0
123	340.5	2.8	95	382.0	4.0	59	157.0	2.7	2818	10981.0	3.9
112	295.0	2.6	86	317.5	3.7	55	133.0	2.4	2507	6312.0	2.5
8	34.5	4.3	9	62.0	6.9	4	23.0	5.8	269	4362.5	16.2
3	11.0	3.7	0	2.5	0.0	0	1.0	0.0	42	306.5	7.3

TABLE 7.1-J

Gaz Tavila Context:		Phase: Natural Count	Count	--%--	6E Count	Count	--%--	6D Count	Count	--%--
RUBBLE	O-O&C-%O/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	O/C-oth-%oth			--			--			--
	Av/Rp-Tot-%O		0	--		0	--		0	--
WALLS	O-O&C-%O/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	O/C-oth-%oth			--			--			--
	Av/Rp-Tot-%O		0	--		0	--		0	--
OCCUPATION IN	O-O&C-%O/C	0	0	--	0	0	--	0	0	0.0%
	C-Bos-%Bos			--			--	0	1	100.0%
	O/C-oth-%oth			--			--	0	0	0.0%
	Av/Rp-Tot-%O		0	--		0	--	0	1	--
OCCUPATION OUT & ASSOCIATED	O-O&C-%O/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	O/C-oth-%oth			--			--			--
	Av/Rp-Tot-%O		0	--		0	--		0	--
OCCUPATION & FILL IN	O-O&C-%O/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	O/C-oth-%oth			--			--			--
	Av/Rp-Tot-%O		0	--		0	--		0	--
OCCUPATION & FILL OUT & ASSOCIATED	O-O&C-%O/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	O/C-oth-%oth			--			--			--
	Av/Rp-Tot-%O		0	--		0	--		0	--

TABLE 7.2-A

6D-C Count	Count	--%--	6C Count	Count	--%--	6A Count	Count	--%--	6-5 Count	Count	--%--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	0	--	0	0	--	0	0	--	0	1	100.0%
		--			--			--	0	0	0.0%
		--			--			--	1	0	0.0%
	0	--		0	--		0	--	0	1	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	0	--	0	6	100.0%	0	0	--	0	0	--
		--	2	0	0.0%			--			--
		--	4	0	0.0%			--			--
	0	--	0	6	0.0%		0	--		0	--

TABLE 7.2-B

5 Count	Count	--%--	6-4 Count	Count	--%--	5-4 Count	Count	--%--	4 Count	Count	--%--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
1	18	90.0%	0	0	--	0	0	--	1	4	80.0%
5	1	5.0%			--			--	0	1	20.0%
12	1	5.0%			--			--	3	0	0.0%
0	20	16.7%		0	--		0	--	0	5	100.0%
0	0	--	0	0	--	0	0	--	3	20	87.0%
		--			--			--	4	3	13.0%
		--			--			--	13	0	0.0%
	0	--		0	--		0	--	0	23	42.9%
0	3	75.0%	0	0	--	0	0	--	0	12	92.3%
0	1	25.0%			--			--	2	1	7.7%
3	0	0.0%			--			--	10	0	0.0%
0	4	--		0	--		0	--	1	13	0.0%
6	35	87.5%	0	0	--	0	0	--	0	0	--
3	4	10.0%			--			--			--
26	1	2.5%			--			--			--
0	40	66.7%		0	--		0	--		0	--

TABLE 7.2-C

5-3 Count	Count	--%--	4-3 Count	Count	--%--	3 Count	Count	--%--	6-2 Count	Count	--%--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
1	13	86.7%	0	0	--	0	6	100.0%	0	0	--
1	1	6.7%			--	2	0	0.0%			--
11	1	6.7%			--	4	0	0.0%			--
0	15	50.0%		0	--	0	6	0.0%		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--

TABLE 7.2-D

2 Count	Count	--%--	2-1 Count	Count	--%--	1 Count	Count	--%--	Total Count	Count	--%--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--	0	0	--
		--			--			--	0	0	--
	0	--		0	--		0	--	0	0	--
0	0	--	0	0	--	0	0	--	0	1	100.0%
		--			--			--	0	0	0.0%
		--			--			--	1	0	0.0%
	0	--		0	--		0	--	0	1	--
0	0	--	0	0	--	0	0	--	2	22	84.6%
		--			--			--	5	3	11.5%
		--			--			--	15	1	3.8%
	0	--		0	--		0	--	0	26	28.6%
0	0	--	0	0	--	0	0	--	4	39	88.6%
		--			--			--	7	4	9.1%
		--			--			--	28	1	2.3%
	0	--		0	--		0	--	0	44	36.4%
0	0	--	0	0	--	0	0	--	0	15	88.2%
		--			--			--	2	2	11.8%
		--			--			--	13	0	0.0%
	0	--		0	--		0	--	1	17	0.0%
0	2	100.0%	0	0	--	0	9	81.8%	6	52	88.1%
0	0	0.0%			--	1	2	18.2%	6	6	10.2%
2	0	0.0%			--	8	0	0.0%	40	1	1.7%
0	2	--		0	--	0	11	0.0%	0	59	50.0%

TABLE 7.2-E

TABLE 7.2-F

Gaz Tavila Context:		Phase: Natural Count	Count	--%--	6E Count	Count	--%--	6D Count	Count	--%--
MIDDEN	0-0&C-%0/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	0/C-oth-%oth			--			--			--
	Av/Rp-Tot-%0		0	--		0	--		0	--
ROOM FILL IN & ASSOCIATED	0-0&C-%0/C	0	0	--	1	15	65.2%	0	1	50.0%
	C-Bos-%Bos			--	3	4	17.4%	0	1	50.0%
	0/C-oth-%oth			--	11	4	17.4%	1	0	0.0%
	Av/Rp-Tot-%0		0	--	0	23	25.0%	0	2	--
UNDIFFER-ENTIATED FILL OUT	0-0&C-%0/C	3	39	90.7%	0	0	--	1	2	100.0%
	C-Bos-%Bos	8	3	7.0%			--	1	0	0.0%
	0/C-oth-%oth	28	1	2.3%			--	0	0	0.0%
	Av/Rp-Tot-%0	0	43	27.3%		0	--	0	2	50.0%
PLATFORM OR LEVELING	0-0&C-%0/C	0	0	--	0	0	--	0	16	100.0%
	C-Bos-%Bos			--			--	3	0	0.0%
	0/C-oth-%oth			--			--	13	0	0.0%
	Av/Rp-Tot-%0		0	--		0	--	0	16	0.0%
MIXED OR OTHER	0-0&C-%0/C	0	0	--	2	9	90.0%	0	0	--
	C-Bos-%Bos			--	0	0	0.0%			--
	0/C-oth-%oth			--	7	1	10.0%			--
	Av/Rp-Tot-%0		0	--	0	10	100.0%		0	--
TOTAL	0-0&C-%0/C	3	39	90.7%	3	24	72.7%	1	19	90.5%
	C-Bos-%Bos	8	3	7.0%	3	4	12.1%	4	2	9.5%
	0/C-oth-%oth	28	1	2.3%	18	5	15.2%	14	0	0.0%
	Av/Rp-Tot-%0	0	43	27.3%	0	33	50.0%	0	21	20.0%

6D-C Count	Count	--%--	6C Count	Count	--%--	6A Count	Count	--%--	6-5 Count	Count	--%--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	4	100.0%	0	1	100.0%	0	0	--	0	1	50.0%
2	0	0.0%	0	0	0.0%			--	0	0	0.0%
2	0	0.0%	1	0	0.0%			--	1	1	50.0%
0	4	0.0%	0	1	--		0	--	0	2	--
0	0	--	1	15	83.3%	0	0	--	0	0	--
0	0	--	4	1	5.6%			--			--
0	0	--	10	2	11.1%			--			--
0	0	--	0	18	20.0%		0	--		0	--
0	1	100.0%	0	0	--	0	2	66.7%	0	0	--
0	0	0.0%			--	0	1	33.3%			--
1	0	0.0%			--	2	0	0.0%			--
0	1	--		0	--	0	3	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	5	100.0%	1	22	88.0%	0	2	66.7%	0	2	66.7%
2	0	0.0%	6	1	4.0%	0	1	33.3%	0	0	0.0%
3	0	0.0%	15	2	8.0%	2	0	0.0%	2	1	33.3%
0	5	0.0%	0	25	14.3%	0	3	--	0	3	--

TABLE 7.2-G

5			6-4			5-4			4		
Count	Count	--%--	Count	Count	--%--	Count	Count	--%--	Count	Count	--%--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	4	66.7%	0	0	--	0	3	75.0%	0	0	--
1	1	16.7%			--	1	0	0.0%			--
3	1	16.7%			--	2	1	25.0%			--
0	6	0.0%		0	--	0	4	0.0%		0	--
0	2	100.0%	0	0	--	0	0	--	0	0	--
0	0	0.0%			--			--			--
2	0	0.0%			--			--			--
0	2	--		0	--		0	--		0	--
0	0	--	0	0	--	0	0	--	0	2	100.0%
0	0	--			--			--	0	0	0.0%
0	0	--			--			--	2	0	0.0%
0	0	--		0	--		0	--	0	2	--
0	0	--	0	4	100.0%	0	0	--	0	0	--
		--	2	0	0.0%			--			--
		--	2	0	0.0%			--			--
	0	--	0	4	0.0%		0	--		0	--
7	62	86.1%	0	4	100.0%	0	3	75.0%	4	38	88.4%
9	7	9.7%	2	0	0.0%	1	0	0.0%	6	5	11.6%
46	3	4.2%	2	0	0.0%	2	1	25.0%	28	0	0.0%
0	72	43.8%	0	4	0.0%	0	4	0.0%	1	43	40.0%

TABLE 7.2-H

5-3 Count	Count	--%--	4-3 Count	Count	--%--	3 Count	Count	--%--	6-2 Count	Count	--%--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	0	--	1	2	100.0%	0	0	--	0	0	--
		--	0	0	0.0%			--			--
		--	1	0	0.0%			--			--
	0	--	1	2	100.0%		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	0	--	0	0	--	0	0	--	1	8	88.9%
		--			--			--	3	1	11.1%
		--			--			--	4	0	0.0%
	0	--		0	--		0	--	0	9	25.0%
1	13	86.7%	1	2	100.0%	0	6	100.0%	1	8	88.9%
1	1	6.7%	0	0	0.0%	2	0	0.0%	3	1	11.1%
11	1	6.7%	1	0	0.0%	4	0	0.0%	4	0	0.0%
0	15	50.0%	1	2	100.0%	0	6	0.0%	0	9	25.0%

TABLE 7.2-I

2			2-1			1			Total		
Count	Count	--%--	Count	Count	--%--	Count	Count	--%--	Count	Count	--%--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--	0	0	--
		--			--			--	0	0	--
	0	--		0	--		0	--	0	0	--
0	11	91.7%	0	13	92.9%	0	0	--	2	55	78.6%
2	1	8.3%	5	1	7.1%			--	14	8	11.4%
9	0	0.0%	8	0	0.0%			--	39	7	10.0%
0	12	0.0%	0	14	0.0%		0	--	1	70	12.5%
0	0	--	0	0	--	0	0	--	5	58	89.2%
		--			--			--	13	4	6.2%
		--			--			--	40	3	4.6%
	0	--		0	--		0	--	0	65	27.8%
0	0	--	0	0	--	0	0	--	0	21	95.5%
		--			--			--	3	1	4.5%
		--			--			--	18	0	0.0%
	0	--		0	--		0	--	0	22	0.0%
0	0	--	0	0	--	0	0	--	3	21	91.3%
		--			--			--	5	1	4.3%
		--			--			--	13	1	4.3%
	0	--		0	--		0	--	0	23	37.5%
0	13	92.9%	0	13	92.9%	0	9	81.8%	22	284	86.9%
2	1	7.1%	5	1	7.1%	1	2	18.2%	55	29	8.9%
11	0	0.0%	8	0	0.0%	8	0	0.0%	207	14	4.3%
0	14	0.0%	0	14	0.0%	0	11	0.0%	2	327	28.6%

TABLE 7.2-J

Gaz Tavila Context:	Phase:	Natural Count	Count	-%-	6E Count	Count	-%-	6D Count	Count	-%-
RUBBLE	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--
WALLS	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--
OCCUPATION IN	tot-rodent-%r	0	0	--	0	0	--	12	0	0.0%
	pol-carniv-%c			--			--	0	0	0.0%
	tool-burn-%b			--			--	0	0	0.0%
	blow-cut-%b&c			--			--	0	0	0.0%
OCCUPATION OUT & ASSOCIATED	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--
OCCUPATION & FILL IN	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--
OCCUPATION & FILL OUT & ASSOCIATED	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--

TABLE 7.3-A

6D-C Count	Count	-%-	6C Count	Count	-%-	6A Count	Count	-%-	6-5 Count	Count	-%-
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
0	0	--	0	0	--	0	0	--	12	0	0.0%
		--			--			--	0	0	0.0%
		--			--			--	0	0	0.0%
		--			--			--	0	0	0.0%
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
0	0	--	32	5	15.6%	0	0	--	0	0	--
		--	0	0	0.0%			--			--
		--	0	0	0.0%			--			--
		--	0	1	3.1%			--			--

TABLE 7.3-B

5			6-4			5-4			4		
Count	Count	-%-	Count	Count	-%-	Count	Count	-%-	Count	Count	-%-
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
90	12	13.3%	0	0	--	0	0	--	110	5	4.5%
1	0	0.0%			--			--	0	0	0.0%
1	4	4.4%			--			--	0	2	1.8%
0	0	0.0%			--			--	0	0	0.0%
0	0	--	0	0	--	0	0	--	156	6	3.8%
		--			--			--	0	0	0.0%
		--			--			--	0	0	0.0%
		--			--			--	0	0	0.0%
20	2	10.0%	0	0	--	0	0	--	131	0	0.0%
0	0	0.0%			--			--	0	0	0.0%
0	0	0.0%			--			--	1	3	2.3%
0	0	0.0%			--			--	0	0	0.0%
398	7	1.8%	0	0	--	0	0	--	0	0	--
1	0	0.0%			--			--			--
0	7	1.8%			--			--			--
0	1	0.3%			--			--			--

TABLE 7.3-C

5-3			4-3			3			6-2		
Count	Count	-%-	Count	Count	-%-	Count	Count	-%-	Count	Count	-%-
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
132	1	0.8%	0	0	--	102	0	0.0%	0	0	--
0	0	0.0%			--	1	0	0.0%			--
0	2	1.5%			--	0	9	8.8%			--
0	0	0.0%			--	0	0	0.0%			--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--

TABLE 7.3-D

2 Count	Count	-%-	2-1 Count	Count	-%-	1 Count	Count	-%-	Total Count	Count	-%-
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--	0	0	--
		--			--			--	0	0	--
		--			--			--	0	0	--
0	0	--	0	0	--	0	0	--	12	0	0.0%
		--			--			--	0	0	0.0%
		--			--			--	0	0	0.0%
		--			--			--	0	0	0.0%
0	0	--	0	0	--	0	0	--	212	17	8.0%
		--			--			--	1	0	0.0%
		--			--			--	1	6	2.8%
		--			--			--	0	0	0.0%
0	0	--	0	0	--	0	0	--	390	7	1.8%
		--			--			--	1	0	0.0%
		--			--			--	0	11	2.8%
		--			--			--	0	0	0.0%
0	0	--	0	0	--	0	0	--	151	2	1.3%
		--			--			--	0	0	0.0%
		--			--			--	1	3	2.0%
		--			--			--	0	0	0.0%
18	0	0.0%	0	0	--	59	0	0.0%	507	12	2.4%
1	0	0.0%			--	0	0	0.0%	2	0	0.0%
0	1	5.6%			--	0	0	0.0%	0	8	1.6%
0	0	0.0%			--	0	0	0.0%	0	2	0.4%

TABLE 7.3-E

TABLE 7.3-F

Gaz Tavila Context:		Phase: Natural Count	Count	-%-	6E Count	Count	-%-	6D Count	Count	-%-
MIDDEN	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--
ROOM FILL IN & ASSOCIATED	tot-rodent-%r	0	0	--	185	3	1.6%	10	1	10.0%
	pol-carniv-%c			--	0	0	0.0%	0	0	0.0%
	tool-burn-%b			--	1	3	1.6%	0	0	0.0%
	blow-cut-%b&c			--	0	0	0.0%	0	0	0.0%
UNDIFFER-ENTIATED FILL OUT	tot-rodent-%r	514	3	0.6%	0	0	--	20	0	0.0%
	pol-carniv-%c	0	1	0.2%			--	0	0	0.0%
	tool-burn-%b	1	1	0.2%			--	0	0	0.0%
	blow-cut-%b&c	0	0	0.0%			--	0	0	0.0%
PLATFORM OR LEVELING	tot-rodent-%r	0	0	--	0	0	--	60	1	1.7%
	pol-carniv-%c			--			--	0	0	0.0%
	tool-burn-%b			--			--	0	0	0.0%
	blow-cut-%b&c			--			--	0	0	0.0%
MIXED OR OTHER	tot-rodent-%r	0	0	--	100	2	2.0%	0	0	--
	pol-carniv-%c			--	0	0	0.0%			--
	tool-burn-%b			--	0	1	1.0%			--
	blow-cut-%b&c			--	0	0	0.0%			--
TOTAL	tot-rodent-%r	514	3	0.6%	285	5	1.8%	102	2	2.0%
	pol-carniv-%c	0	1	0.2%	0	0	0.0%	0	0	0.0%
	tool-burn-%b	1	1	0.2%	1	4	1.4%	0	0	0.0%
	blow-cut-%b&c	0	0	0.0%	0	0	0.0%	0	0	0.0%

6D-C Count	Count	-%-	6C Count	Count	-%-	6A Count	Count	-%-	6-5 Count	Count	-%-
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
36	2	5.6%	26	2	7.7%	0	0	--	2	0	0.0%
0	0	0.0%	0	0	0.0%			--	0	0	0.0%
0	2	5.6%	0	3	11.5%			--	0	0	0.0%
0	0	0.0%	0	0	0.0%			--	0	0	0.0%
11	0	0.0%	87	9	10.3%	0	0	--	0	0	--
0	0	0.0%	0	0	0.0%			--			--
0	0	0.0%	0	0	0.0%			--			--
0	0	0.0%	0	0	0.0%			--			--
14	1	7.1%	0	0	--	22	0	0.0%	0	0	--
0	0	0.0%			--	0	0	0.0%			--
0	2	14.3%			--	0	0	0.0%			--
0	0	0.0%			--	0	0	0.0%			--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
61	3	4.9%	145	16	11.0%	22	0	0.0%	14	0	0.0%
0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
0	4	6.6%	0	3	2.1%	0	0	0.0%	0	0	0.0%
0	0	0.0%	0	1	0.7%	0	0	0.0%	0	0	0.0%

TABLE 7.3-G

5			6-4			5-4			4		
Count	Count	-%-	Count	Count	-%-	Count	Count	-%-	Count	Count	-%-
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
40	4	10.0%	0	0	--	8	1	12.5%	0	0	--
0	0	0.0%			--	0	0	0.0%			--
0	0	0.0%			--	0	0	0.0%			--
0	0	0.0%			--	0	0	0.0%			--
44	0	0.0%	0	0	--	0	0	--	0	0	--
0	0	0.0%			--			--			--
0	0	0.0%			--			--			--
0	0	0.0%			--			--			--
4	0	0.0%	0	0	--	0	0	--	12	1	8.3%
0	0	0.0%			--			--	0	0	0.0%
0	0	0.0%			--			--	0	0	0.0%
0	0	0.0%			--			--	0	0	0.0%
0	0	--	49	0	0.0%	0	0	--	0	0	--
		--	0	0	0.0%			--			--
		--	0	1	2.0%			--			--
		--	0	0	0.0%			--			--
596	25	4.2%	49	0	0.0%	8	1	12.5%	409	12	2.9%
2	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1	11	1.8%	0	1	2.0%	0	0	0.0%	1	5	1.2%
0	1	0.2%	0	0	0.0%	0	0	0.0%	0	0	0.0%

TABLE 7.3-H

TABLE 7.3-I

5-3 Count	Count	-%-	4-3 Count	Count	-%-	3 Count	Count	-%-	6-2 Count	Count	-%-
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
0	0	--	42	2	4.8%	0	0	--	0	0	--
		--	0	0	0.0%			--			--
		--	1	2	4.8%			--			--
		--	0	0	0.0%			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
0	0	--	0	0	--	0	0	--	60	2	3.3%
		--			--			--	0	0	0.0%
		--			--			--	1	0	0.0%
		--			--			--	0	0	0.0%
132	1	0.8%	42	2	4.8%	102	0	0.0%	60	2	3.3%
0	0	0.0%	0	0	0.0%	1	0	0.0%	0	0	0.0%
0	2	1.5%	1	2	4.8%	0	9	8.8%	1	0	0.0%
0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%

2			2-1			1			Total		
Count	Count	-%-	Count	Count	-%-	Count	Count	-%-	Count	Count	-%-
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--	0	0	--
		--			--			--	0	0	--
		--			--			--	0	0	--
105	5	4.8%	95	3	3.2%	0	0	--	549	23	4.2%
0	0	0.0%	0	0	0.0%			--	0	0	0.0%
1	2	1.9%	2	1	1.1%			--	5	13	2.4%
0	0	0.0%	0	1	1.1%			--	0	1	0.2%
0	0	--	0	0	--	0	0	--	676	12	1.8%
		--			--			--	0	1	0.1%
		--			--			--	1	1	0.1%
		--			--			--	0	0	0.0%
0	0	--	0	0	--	0	0	--	112	3	2.7%
		--			--			--	0	0	0.0%
		--			--			--	0	2	1.8%
		--			--			--	0	0	0.0%
0	0	--	0	0	--	0	0	--	209	4	1.9%
		--			--			--	0	0	0.0%
		--			--			--	1	2	1.0%
		--			--			--	0	0	0.0%
123	5	4.1%	95	3	3.2%	59	0	0.0%	2818	80	2.8%
1	0	0.0%	0	0	0.0%	0	0	0.0%	4	1	0.0%
1	3	2.4%	2	1	1.1%	0	0	0.0%	9	46	1.6%
0	0	0.0%	0	1	1.1%	0	0	0.0%	0	3	0.1%

TABLE 7.3-J

TABLE 7.4-A

Yahya VII Context:	Phase: Class:	E Count	E Weight	E Index	D Count	D Weight	D Index	C2 Count	C2 Weight	C2 Index
RUBBLE	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0
WALLS	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0
OCCUPATION IN	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0
OCCUPATION OUT & ASSOCIATED	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0
OCCUPATION & FILL IN	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0
OCCUPATION & FILL OUT & ASSOCIATED	total	0	0.0	0.0	0	0.0	0.0	213	1103.0	5.2
	med.mammal			0.0			0.0	154	387.0	2.5
	lg.mammal			0.0			0.0	53	694.0	13.1
	other			0.0			0.0	6	22.0	3.7

C2-1 / C1			C Total			B6			B6-5		
Count	Weight	Index	Count	Weight	Index	Count	Weight	Index	Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0	0	0.0	0.0			0.0			0.0
		0.0	0	0.0	0.0			0.0			0.0
		0.0	0	0.0	0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0	0	0.0	0.0			0.0			0.0
		0.0	0	0.0	0.0			0.0			0.0
		0.0	0	0.0	0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	11	92.0	8.4
		0.0	0	0.0	0.0			0.0	6	24.0	4.0
		0.0	0	0.0	0.0			0.0	5	68.0	13.6
		0.0	0	0.0	0.0			0.0	0	0.0	0.0
0	0.0	0.0	0	0.0	0.0	24	642.0	26.8	0	0.0	0.0
		0.0	0	0.0	0.0	11	77.5	7.0			0.0
		0.0	0	0.0	0.0	13	564.5	43.4			0.0
		0.0	0	0.0	0.0	0	0.0	0.0			0.0
0	0.0	0.0	0	0.0	0.0	2	8.5	4.3	54	659.0	12.2
		0.0	0	0.0	0.0	2	8.5	4.3	33	181.0	5.5
		0.0	0	0.0	0.0	0	0.0	0.0	21	478.0	22.8
		0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
0	0.0	0.0	213	1103.0	5.2	4	90.5	22.6	0	0.0	0.0
		0.0	154	387.0	2.5	2	14.0	7.0			0.0
		0.0	53	694.0	13.1	2	76.5	38.3			0.0
		0.0	6	22.0	3.7	0	0.0	0.0			0.0

TABLE 7.4-B

B6-4 Count	B6-4 Weight	B6-4 Index	B4 Count	B4 Weight	B4 Index	B6-3 Count	B6-3 Weight	B6-3 Index	B5-3 Count	B5-3 Weight	B5-3 Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
78	707.5	9.1	164	2087.0	12.7	0	0.0	0.0	0	0.0	0.0
63	278.0	4.4	85	205.5	2.4			0.0			0.0
15	429.5	28.6	74	1509.0	20.4			0.0			0.0
0	0.0	0.0	5	372.5	74.5			0.0			0.0

TABLE 7.4-C

B3			B3-2			B2			B1 / B6-1		
Count	Weight	Index	Count	Weight	Index	Count	Weight	Index	Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	586	2639.5	4.5	0	0.0	0.0
		0.0			0.0	478	1365.0	2.9			0.0
		0.0			0.0	95	1197.0	12.5			0.0
		0.0			0.0	12	77.5	6.5			0.0
0	0.0	0.0	57	360.0	6.3	99	1528.0	15.4	0	0.0	0.0
		0.0	42	135.5	3.2	71	341.0	4.8			0.0
		0.0	15	224.5	15.0	27	1169.0	43.3			0.0
		0.0	0	0.0	0.0	1	18.0	18.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
309	1802.0	5.8	0	0.0	0.0	243	1361.0	5.6	371	2793.0	7.5
246	744.0	3.0			0.0	192	451.0	2.3	290	1146.0	4.0
61	1049.5	17.2			0.0	46	867.5	18.9	77	1628.5	21.1
2	8.5	4.3			0.0	5	42.5	8.5	4	18.5	4.6

TABLE 7.4-D

B Total Count	Weight	Index	B2-A Count	Weight	Index	A Count	Weight	Index	Total Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	16	333.0	20.8	16	333.0	20.8
0	0.0	0.0			0.0	10	63.5	6.4	10	63.5	6.4
0	0.0	0.0			0.0	6	269.5	44.9	6	269.5	44.9
0	0.0	0.0			0.0	0	0.0	0.0	0	0.0	0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
0	0.0	0.0			0.0			0.0	0	0.0	0.0
0	0.0	0.0			0.0			0.0	0	0.0	0.0
0	0.0	0.0			0.0			0.0	0	0.0	0.0
597	2731.5	4.6	0	0.0	0.0	0	0.0	0.0	597	2731.5	4.6
484	1389.0	2.9			0.0			0.0	484	1389.0	2.9
101	1265.0	12.5			0.0			0.0	101	1265.0	12.5
12	77.5	6.5			0.0			0.0	12	77.5	6.5
180	2530.0	14.1	0	0.0	0.0	12	57.0	4.8	192	2587.0	13.5
124	554.0	4.5			0.0	11	48.0	4.4	135	602.0	4.5
55	1958.0	35.6			0.0	1	9.0	9.0	56	1967.0	35.1
1	18.0	18.0			0.0	0	0.0	0.0	1	18.0	18.0
56	667.5	11.9	0	0.0	0.0	125	797.0	6.4	181	1464.5	8.1
35	189.5	5.4			0.0	110	433.0	3.9	145	622.5	4.3
21	478.0	22.8			0.0	11	357.5	32.5	32	835.5	26.1
0	0.0	0.0			0.0	4	6.5	1.6	4	6.5	1.6
1169	8841.0	7.6	0	0.0	0.0	69	348.5	5.1	1451	10292.5	7.1
878	2838.5	3.2			0.0	57	186.0	3.3	1089	3411.5	3.1
275	5560.5	20.2			0.0	11	156.0	14.2	339	6410.5	18.9
16	442.0	27.6			0.0	1	6.5	6.5	23	470.5	20.5

TABLE 7.4-E

Yahya VII Context:	Phase: Class:	E Count	Weight	Index	D Count	Weight	Index	C2 Count	Weight	Index
MIDDEN	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0
ROOM FILL IN & ASSOCIATED	total	0	0.0	0.0	166	1235.5	7.4	132	1243.5	9.4
	med.mammal			0.0	116	451.5	3.9	74	270.0	3.6
	lg.mammal			0.0	49	777.5	15.9	52	957.0	18.4
	other			0.0	1	6.5	6.5	6	16.5	2.8
UNDIFFER-ENTIATED FILL OUT	total	0	0.0	0.0	45	344.0	7.6	0	0.0	0.0
	med.mammal			0.0	30	124.0	4.1			0.0
	lg.mammal			0.0	12	181.5	15.1			0.0
	other			0.0	3	38.5	12.8			0.0
PLATFORM OR LEVELING	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0
MIXED OR OTHER	total	54	257.5	4.8	0	0.0	0.0	0	0.0	0.0
	med.mammal	37	60.0	1.6			0.0			0.0
	lg.mammal	16	192.5	12.0			0.0			0.0
	other	1	5.0	5.0			0.0			0.0
TOTAL	total	54	257.5	4.8	211	1579.5	7.5	345	2346.5	6.8
	med.mammal	37	60.0	1.6	146	575.5	3.9	228	657.0	2.9
	lg.mammal	16	192.5	12.0	61	959.0	15.7	105	1651.0	15.7
	other	1	5.0	5.0	4	45.0	11.3	12	38.5	3.2

TABLE 7.4-F

C2-1 / C1 Count	Weight	Index	C Total Count	Weight	Index	B6 Count	Weight	Index	B6-5 Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0	0	0.0	0.0			0.0			0.0
		0.0	0	0.0	0.0			0.0			0.0
		0.0	0	0.0	0.0			0.0			0.0
25	561.0	22.4	157	1804.5	11.5	0	0.0	0.0	0	0.0	0.0
10	39.5	4.0	84	309.5	3.7			0.0			0.0
12	516.5	43.0	64	1473.5	23.0			0.0			0.0
3	5.0	1.7	9	21.5	2.4			0.0			0.0
135	2124.5	15.7	135	2124.5	15.7	0	0.0	0.0	0	0.0	0.0
69	295.5	4.3	69	295.5	4.3			0.0			0.0
60	1809.0	30.2	60	1809.0	30.2			0.0			0.0
6	20.0	3.3	6	20.0	3.3			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0	0	0.0	0.0			0.0			0.0
		0.0	0	0.0	0.0			0.0			0.0
		0.0	0	0.0	0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0	0	0.0	0.0			0.0			0.0
		0.0	0	0.0	0.0			0.0			0.0
		0.0	0	0.0	0.0			0.0			0.0
160	2685.5	16.8	505	5032.0	10.0	30	741.0	24.7	65	751.0	11.6
79	335.0	4.2	307	992.0	3.2	15	100.0	6.7	39	205.0	5.3
72	2325.5	32.3	177	3976.5	22.5	15	641.0	42.7	26	546.0	21.0
9	25.0	2.8	21	63.5	3.0	0	0.0	0.0	0	0.0	0.0

TABLE 7.4-G

B6-4 Count	Weight	Index	B4 Count	Weight	Index	B6-3 Count	Weight	Index	B5-3 Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	101	731.5	7.2	1099	2602.5	2.4
		0.0			0.0	70	241.5	3.5	919	1208.5	1.3
		0.0			0.0	28	487.0	17.4	177	1324.5	7.5
		0.0			0.0	3	3.0	1.0	3	69.5	23.2
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	65	494.0	7.6	0	0.0	0.0	0	0.0	0.0
		0.0	49	109.5	2.2			0.0			0.0
		0.0	16	377.0	23.6			0.0			0.0
		0.0	0	7.5	0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
78	707.5	9.1	229	2581.0	11.3	101	731.5	7.2	1099	2602.5	2.4
63	278.0	4.4	134	315.0	2.4	70	241.5	3.5	919	1208.5	1.3
15	429.5	28.6	90	1886.0	21.0	28	487.0	17.4	177	1324.5	7.5
0	0.0	0.0	5	380.0	76.0	3	3.0	1.0	3	69.5	23.2

TABLE 7.4-H

B3			B3-2			B2			B1 / B6-1		
Count	Weight	Index	Count	Weight	Index	Count	Weight	Index	Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	27	431.0	16.0	0	0.0	0.0
		0.0			0.0	5	12.0	2.4			0.0
		0.0			0.0	19	412.0	21.7			0.0
		0.0			0.0	3	7.0	2.3			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
119	364.0	3.1	2	5.0	2.5	0	0.0	0.0	78	911.0	11.7
88	163.0	1.9	1	1.0	1.0			0.0	51	176.5	3.5
28	191.0	6.8	1	4.0	4.0			0.0	24	702.5	29.3
3	10.0	3.3	0	0.0	0.0			0.0	3	32.0	10.7
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
428	2166.0	5.1	59	365.0	6.2	955	5959.5	6.2	449	3704.0	8.2
334	907.0	2.7	43	136.5	3.2	746	2169.0	2.9	341	1322.5	3.9
89	1240.5	13.9	16	228.5	14.3	188	3645.5	19.4	101	2331.0	23.1
5	18.5	3.7	0	0.0	0.0	21	145.0	6.9	7	50.5	7.2

TABLE 7.4-I

B Total			B2-A			A			Total		
Count	Weight	Index	Count	Weight	Index	Count	Weight	Index	Count	Weight	Index
1227	3765.0	3.1	0	0.0	0.0	63	905.5	14.4	1290	4670.5	3.6
994	1462.0	1.5			0.0	29	109.0	3.8	1023	1571.0	1.5
224	2223.5	9.9			0.0	31	730.0	23.5	255	2953.5	11.6
9	79.5	8.8			0.0	3	66.5	22.2	12	146.0	12.2
0	0.0	0.0	0	0.0	0.0	246	1774.0	7.2	569	4814.0	8.5
0	0.0	0.0			0.0	159	496.0	3.1	359	1257.0	3.5
0	0.0	0.0			0.0	84	1228.5	14.6	197	3479.5	17.7
0	0.0	0.0			0.0	3	49.5	16.5	13	77.5	6.0
264	1774.0	6.7	477	3391.5	7.1	0	0.0	0.0	921	7634.0	8.3
189	450.0	2.4	337	1083.0	3.2			0.0	625	1952.5	3.1
69	1274.5	18.5	137	2097.0	15.3			0.0	278	5362.0	19.3
6	49.5	8.3	3	211.5	70.5			0.0	18	319.5	17.8
0	0.0	0.0	0	0.0	0.0	101	1322.0	13.1	101	1322.0	13.1
0	0.0	0.0			0.0	63	325.5	5.2	63	325.5	5.2
0	0.0	0.0			0.0	36	920.5	25.6	36	920.5	25.6
0	0.0	0.0			0.0	2	76.0	38.0	2	76.0	38.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	54	257.5	4.8
0	0.0	0.0			0.0			0.0	37	60.0	1.6
0	0.0	0.0			0.0			0.0	16	192.5	12.0
0	0.0	0.0			0.0			0.0	1	5.0	5.0
3493	20309.0	5.8	477	3391.5	7.1	632	5537.0	8.8	5372	36106.5	6.7
2704	6883.0	2.5	337	1083.0	3.2	439	1661.0	3.8	3970	11254.5	2.8
745	12759.5	17.1	137	2097.0	15.3	180	3671.0	20.4	1316	23655.5	18.0
44	666.5	15.1	3	211.5	70.5	13	205.0	15.8	86	1196.5	13.9

TABLE 7.4-J

TABLE 7.5-A

Yahya VII Context:	Phase:	E Count	Count	--%--	D Count	Count	--%--	C2 Count	Count	--%--
RUBBLE	0-0&C-%0/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	0/C-oth-%oth			--			--			--
	Av/Rp-Tot-%0		0	--		0	--		0	--
WALLS	0-0&C-%0/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	0/C-oth-%oth			--			--			--
	Av/Rp-Tot-%0		0	--		0	--		0	--
OCCUPATION IN	0-0&C-%0/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	0/C-oth-%oth			--			--			--
	Av/Rp-Tot-%0		0	--		0	--		0	--
OCCUPATION OUT & ASSOCIATED	0-0&C-%0/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	0/C-oth-%oth			--			--			--
	Av/Rp-Tot-%0		0	--		0	--		0	--
OCCUPATION & FILL IN	0-0&C-%0/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	0/C-oth-%oth			--			--			--
	Av/Rp-Tot-%0		0	--		0	--		0	--
OCCUPATION & FILL OUT & ASSOCIATED	0-0&C-%0/C	0	0	--	0	0	--	1	23	76.7%
	C-Bos-%Bos			--			--	2	7	23.3%
	0/C-oth-%oth			--			--	20	0	0.0%
	Av/Rp-Tot-%0		0	--		0	--	0	30	33.3%

C2-1 / C1 Count	Count	--%--	C Total Count	Count	--%--	B6 Count	Count	--%--	B6-5 Count	Count	--%--
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--			--			--
		--	0	0	--			--			--
	0	--	0	0	--		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--			--			--
		--	0	0	--			--			--
	0	--	0	0	--		0	--		0	--
0	0	--	0	0	--	0	0	--	0	3	60.0%
		--	0	0	--			--	3	2	40.0%
		--	0	0	--			--	0	0	0.0%
	0	--	0	0	--		0	--	0	5	0.0%
0	0	--	0	0	--	1	9	64.3%	0	0	--
		--	0	0	--	3	5	35.7%			--
		--	0	0	--	5	0	0.0%			--
	0	--	0	0	--	0	14	25.0%		0	--
0	0	--	0	0	--	0	1	100.0%	4	18	72.0%
		--	0	0	--	0	0	0.0%	8	6	24.0%
		--	0	0	--	1	0	0.0%	6	1	4.0%
	0	--	0	0	--	0	1	--	2	25	33.3%
0	0	--	1	23	76.7%	0	1	50.0%	0	0	--
		--	2	7	23.3%	0	1	50.0%			--
		--	20	0	0.0%	1	0	0.0%			--
	0	--	0	30	33.3%	0	2	--		0	--

TABLE 7.5-B

B6-4 Count	Count	--%--	B4 Count	Count	--%--	B6-3 Count	Count	--%--	B5-3 Count	Count	--%--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
3	17	89.5%	0	12	41.4%	0	0	--	0	0	--
4	2	10.5%	3	17	58.6%			--			--
10	0	0.0%	9	0	0.0%			--			--
1	19	42.9%	0	29	0.0%		0	--		0	--

TABLE 7.5-C

B3 Count	Count	--%--	B3-2 Count	Count	--%--	B2 Count	Count	--%--	B1 / B6-1 Count	Count	--%--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	0	--	0	0	--	6	81	78.6%	0	0	--
		--			--	10	18	17.5%			--
		--			--	65	4	3.9%			--
	0	--		0	--	2	103	37.5%		0	--
0	0	--	1	11	64.7%	5	32	74.4%	0	0	--
		--	3	6	35.3%	10	8	18.6%			--
		--	7	0	0.0%	17	3	7.0%			--
	0	--	3	17	25.0%	0	43	33.3%		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
6	62	83.8%	0	0	--	1	23	63.9%	13	48	70.6%
21	11	14.9%			--	6	11	30.6%	26	17	25.0%
35	1	1.4%			--	16	2	5.6%	9	3	4.4%
1	74	22.2%		0	--	1	36	14.3%	4	68	33.3%

TABLE 7.5-D

B Total Count	Count	--%--	B2-A Count	Count	--%--	A Count	Count	--%--	Total Count	Count	--%--
0	0	--	0	0	--	0	4	66.7%	0	4	66.7%
0	0	--			--	1	2	33.3%	1	2	33.3%
0	0	--			--	3	0	0.0%	3	0	0.0%
0	0	--		0	--	0	6	0.0%	0	6	0.0%
0	0	--	0	0	--	0	0	--	0	0	--
0	0	--			--			--	0	0	--
0	0	--			--			--	0	0	--
0	0	--		0	--		0	--	0	0	--
6	84	77.8%	0	0	--	0	0	--	6	84	77.8%
13	20	18.5%			--			--	13	20	18.5%
65	4	3.7%			--			--	65	4	3.7%
2	108	31.6%		0	--		0	--	2	108	31.6%
7	52	70.3%	0	0	--	0	5	100.0%	7	57	72.2%
16	19	25.7%			--	2	0	0.0%	18	19	24.1%
29	3	4.1%			--	3	0	0.0%	32	3	3.8%
3	74	30.4%		0	--	0	5	0.0%	3	79	28.0%
4	19	73.1%	0	0	--	4	33	84.6%	8	52	80.0%
8	6	23.1%			--	5	6	15.4%	13	12	18.5%
7	1	3.8%			--	24	0	0.0%	31	1	1.5%
2	26	33.3%		0	--	0	39	44.4%	2	65	38.1%
23	163	71.5%	0	0	--	0	15	83.3%	24	201	72.8%
60	59	25.9%			--	3	3	16.7%	65	69	25.0%
80	6	2.6%			--	12	0	0.0%	112	6	2.2%
7	228	27.7%		0	--	0	18	0.0%	7	276	27.0%

TABLE 7.5-E

TABLE 7.5-F

Yahya VII Context:	Phase:	E Count	Count	--%--	D Count	Count	--%--	C2 Count	Count	--%--
MIDDEN	O-O&C-%O/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	O/C-oth-%oth			--			--			--
	Av/Rp-Tot-%O		0	--		0	--		0	--
ROOM FILL IN & ASSOCIATED	O-O&C-%O/C	0	0	--	5	26	76.5%	2	15	51.7%
	C-Bos-%Bos			--	4	7	20.6%	4	13	44.8%
	O/C-oth-%oth			--	17	1	2.9%	9	1	3.4%
	Av/Rp-Tot-%O		0	--	0	34	55.6%	0	29	33.3%
UNDIFFER-ENTIATED FILL OUT	O-O&C-%O/C	0	0	--	0	10	83.3%	0	0	--
	C-Bos-%Bos			--	3	2	16.7%			--
	O/C-oth-%oth			--	7	0	0.0%			--
	Av/Rp-Tot-%O		0	--	0	12	0.0%		0	--
PLATFORM OR LEVELING	O-O&C-%O/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	O/C-oth-%oth			--			--			--
	Av/Rp-Tot-%O		0	--		0	--		0	--
MIXED OR OTHER	O-O&C-%O/C	2	12	80.0%	0	0	--	0	0	--
	C-Bos-%Bos	3	2	13.3%			--			--
	O/C-oth-%oth	7	1	6.7%			--			--
	Av/Rp-Tot-%O	1	15	40.0%		0	--		0	--
TOTAL	O-O&C-%O/C	2	12	80.0%	5	36	78.3%	3	38	64.4%
	C-Bos-%Bos	3	2	13.3%	7	9	19.6%	6	20	33.9%
	O/C-oth-%oth	7	1	6.7%	24	1	2.2%	29	1	1.7%
	Av/Rp-Tot-%O	1	15	40.0%	0	46	41.7%	0	59	33.3%

C2-1 / C1 Count	Count	--%--	C Total Count	Count	--%--	B6 Count	Count	--%--	B6-5 Count	Count	--%--
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--			--			--
		--	0	0	--			--			--
	0	--	0	0	--		0	--		0	--
0	3	37.5%	2	18	48.6%	0	0	--	0	0	--
0	5	62.5%	4	18	48.6%			--			--
3	0	0.0%	12	1	2.7%			--			--
0	8	--	0	37	33.3%		0	--		0	--
2	13	36.1%	2	13	36.1%	0	0	--	0	0	--
7	21	58.3%	7	21	58.3%			--			--
4	2	5.6%	4	2	5.6%			--			--
0	36	22.2%	0	36	22.2%		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--			--			--
		--	0	0	--			--			--
	0	--	0	0	--		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--			--			--
		--	0	0	--			--			--
	0	--	0	0	--		0	--		0	--
2	16	36.4%	5	54	52.4%	1	11	64.7%	4	21	70.0%
7	26	59.1%	13	46	44.7%	3	6	35.3%	11	8	26.7%
7	2	4.5%	36	3	2.9%	7	0	0.0%	6	1	3.3%
0	44	22.2%	0	103	27.8%	0	17	25.0%	2	30	26.7%

TABLE 7.5-G

B6-4 Count	Count	--%--	B4 Count	Count	--%--	B6-3 Count	Count	--%--	B5-3 Count	Count	--%--
0	0	--	0	0	--	2	13	81.3%	4	67	88.2%
		--			--	2	2	12.5%	16	8	10.5%
		--			--	9	1	6.3%	47	1	1.3%
	0	--		0	--	0	16	50.0%	4	76	20.0%
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	0	--	0	5	50.0%	0	0	--	0	0	--
		--	1	5	50.0%			--			--
		--	4	0	0.0%			--			--
	0	--	0	10	0.0%		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
3	17	89.5%	0	17	43.6%	2	13	81.3%	4	67	88.2%
4	2	10.5%	4	22	56.4%	2	2	12.5%	16	8	10.5%
10	0	0.0%	13	0	0.0%	9	1	6.3%	47	1	1.3%
1	19	42.9%	0	39	0.0%	0	16	50.0%	4	76	20.0%

TABLE 7.5-H

B3 Count	Count	--%--	B3-2 Count	Count	--%--	B2 Count	Count	--%--	B1 / B6-1 Count	Count	--%--
0	0	--	0	0	--	0	0	0.0%	0	0	--
		--			--	0	4	100.0%			--
		--			--	0	0	0.0%			--
	0	--		0	--	0	4	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
2	17	94.4%	0	0	--	0	0	--	0	11	73.3%
2	0	0.0%	0	0	--			--	1	3	20.0%
13	1	5.6%	0	0	--			--	10	1	6.7%
1	18	50.0%	0	0	--		0	--	0	15	0.0%
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
8	79	85.9%	1	11	64.7%	12	136	73.1%	13	59	71.1%
23	11	12.0%	3	6	35.3%	26	41	22.0%	27	20	24.1%
48	2	2.2%	7	0	0.0%	98	9	4.8%	19	4	4.8%
2	92	25.8%	3	17	25.0%	3	186	31.6%	4	83	32.5%

TABLE 7.5-I

B Total Count	Count	--%--	B2-A Count	Count	--%--	A Count	Count	--%--	Total Count	Count	--%--
6	80	83.3%	0	0	--	1	8	36.4%	7	88	74.6%
18	14	14.6%			--	3	13	59.1%	21	27	22.9%
56	2	2.1%			--	4	1	4.5%	60	3	2.5%
4	96	25.0%		0	--	1	22	25.0%	5	118	25.0%
0	0	--	0	0	--	7	42	77.8%	14	86	68.8%
0	0	--			--	9	12	22.2%	17	37	29.6%
0	0	--			--	26	0	0.0%	55	2	1.6%
0	0	--		0	--	18	54	43.8%	18	125	45.2%
2	33	76.7%	2	65	71.4%	0	0	--	6	121	66.5%
4	8	18.6%	18	19	20.9%			--	32	50	27.5%
27	2	4.7%	45	7	7.7%			--	83	11	6.0%
1	43	33.3%	4	91	10.0%		0	--	5	182	15.8%
0	0	--	0	0	--	5	18	64.3%	5	18	64.3%
0	0	--			--	2	10	35.7%	2	10	35.7%
0	0	--			--	11	0	0.0%	11	0	0.0%
0	0	--		0	--	0	28	71.4%	0	28	71.4%
0	0	--	0	0	--	0	0	--	2	12	80.0%
0	0	--			--			--	3	2	13.3%
0	0	--			--			--	7	1	6.7%
0	0	--		0	--		0	--	1	15	40.0%
48	431	75.0%	2	65	71.4%	17	125	72.7%	79	723	72.2%
119	126	21.9%	18	19	20.9%	25	46	26.7%	185	248	24.8%
264	18	3.1%	45	7	7.7%	83	1	0.6%	459	31	3.1%
19	575	28.7%	4	91	10.0%	19	172	40.5%	43	1002	29.9%

TABLE 7.5-J

Yahya VII Context:	Phase:	E Count	Count	-%-	D Count	Count	-%-	C2 Count	Count	-%-
RUBBLE	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--
WALLS	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--
OCCUPATION IN	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--
OCCUPATION OUT & ASSOCIATED	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--
OCCUPATION & FILL IN	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--
OCCUPATION & FILL OUT & ASSOCIATED	tot-rodent-%r	0	0	--	0	0	--	213	12	5.6%
	pol-carniv-%c			--			--	0	3	1.4%
	tool-burn-%b			--			--	1	4	1.9%
	blow-cut-%b&c			--			--	1	1	0.9%

TABLE 7.6-A

C2-1 / C1 Count	Count	-%-	C Total Count	Count	-%-	B6 Count	Count	-%-	B6-5 Count	Count	-%-
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--			--			--
		--	0	0	--			--			--
		--	0	0	--			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--			--			--
		--	0	0	--			--			--
		--	0	0	--			--			--
0	0	--	0	0	--	0	0	--	11	1	9.1%
		--	0	0	--			--	0	0	0.0%
		--	0	0	--			--	0	0	0.0%
		--	0	0	--			--	0	0	0.0%
0	0	--	0	0	--	24	4	16.7%	0	0	--
		--	0	0	--	0	0	0.0%			--
		--	0	0	--	0	1	4.2%			--
		--	0	0	--	0	0	0.0%			--
0	0	--	0	0	--	2	0	0.0%	54	9	16.7%
		--	0	0	--	0	0	0.0%	0	0	0.0%
		--	0	0	--	0	0	0.0%	0	2	3.7%
		--	0	0	--	0	0	0.0%	0	0	0.0%
0	0	--	213	12	5.6%	4	2	50.0%	0	0	--
		--	0	3	1.4%	0	0	0.0%			--
		--	1	4	1.9%	0	0	0.0%			--
		--	1	1	0.9%	0	0	0.0%			--

TABLE 7.6-B

B6-4 Count	Count	-%-	B4 Count	Count	-%-	B6-3 Count	Count	-%-	B5-3 Count	Count	-%-
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
78	6	7.7%	164	9	5.5%	0	0	--	0	0	--
0	0	0.0%	0	1	0.6%			--			--
1	0	0.0%	0	1	0.6%			--			--
0	0	0.0%	2	0	1.2%			--			--

TABLE 7.6-C

B3 Count	Count	-%-	B3-2 Count	Count	-%-	B2 Count	Count	-%-	B1 / B6-1 Count	Count	-%-
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
0	0	--	0	0	--	586	75	12.8%	0	0	--
		--			--	0	3	0.5%			--
		--			--	0	10	1.7%			--
		--			--	1	2	0.5%			--
0	0	--	57	5	8.8%	99	18	18.2%	0	0	--
		--	0	3	5.3%	0	0	0.0%			--
		--	0	0	0.0%	0	3	3.0%			--
		--	1	1	3.5%	0	0	0.0%			--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
309	14	4.5%	0	0	--	243	10	4.1%	371	40	10.8%
0	3	1.0%			--	0	0	0.0%	0	0	0.0%
0	7	2.3%			--	2	2	0.8%	3	12	3.2%
0	1	0.3%			--	1	0	0.4%	1	2	0.8%

TABLE 7.6-D

B Total Count	Count	-%-	B2-A Count	Count	-%-	A Count	Count	-%-	Total Count	Count	-%-
0	0	--	0	0	--	16	2	12.5%	16	2	12.5%
0	0	--			--	0	0	0.0%	0	0	0.0%
0	0	--			--	0	0	0.0%	0	0	0.0%
0	0	--			--	0	0	0.0%	0	0	0.0%
0	0	--	0	0	--	0	0	--	0	0	--
0	0	--			--			--	0	0	--
0	0	--			--			--	0	0	--
0	0	--			--			--	0	0	--
597	76	12.7%	0	0	--	0	0	--	597	76	12.7%
0	3	0.5%			--			--	0	3	0.5%
0	10	1.7%			--			--	0	10	1.7%
1	2	0.5%			--			--	1	2	0.5%
180	27	15.0%	0	0	--	12	0	0.0%	192	27	14.1%
0	3	1.7%			--	0	0	0.0%	0	3	1.6%
0	4	2.2%			--	0	0	0.0%	0	4	2.1%
1	1	1.1%			--	0	0	0.0%	1	1	1.0%
56	9	16.1%	0	0	--	125	22	17.6%	181	31	17.1%
0	0	0.0%			--	0	0	0.0%	0	0	0.0%
0	2	3.6%			--	0	3	2.4%	0	5	2.8%
0	0	0.0%			--	0	0	0.0%	0	0	0.0%
1169	81	6.9%	0	0	--	69	19	27.5%	1451	112	7.7%
0	4	0.3%			--	0	0	0.0%	0	7	0.5%
6	22	1.9%			--	0	0	0.0%	7	26	1.8%
4	3	0.6%			--	0	0	0.0%	5	4	0.6%

TABLE 7.6-E

Yahya VII Context:	Phase:	E Count	Count	-%-	D Count	Count	-%-	C2 Count	Count	-%-
MIDDEN	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--
ROOM FILL IN & ASSOCIATED	tot-rodent-%r	0	0	--	166	6	3.6%	132	6	4.5%
	pol-carniv-%c			--	1	0	0.0%	0	2	1.5%
	tool-burn-%b			--	0	43	25.9%	0	4	3.0%
	blow-cut-%b&c			--	0	0	0.0%	1	1	1.5%
UNDIFFER-ENTIATED FILL OUT	tot-rodent-%r	0	0	--	45	1	2.2%	0	0	--
	pol-carniv-%c			--	0	0	0.0%			--
	tool-burn-%b			--	0	3	6.7%			--
	blow-cut-%b&c			--	0	0	0.0%			--
PLATFORM OR LEVELING	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--
MIXED OR OTHER	tot-rodent-%r	54	4	7.4%	0	0	--	0	0	--
	pol-carniv-%c	0	0	0.0%			--			--
	tool-burn-%b	0	3	5.6%			--			--
	blow-cut-%b&c	0	0	0.0%			--			--
TOTAL	tot-rodent-%r	54	4	7.4%	211	7	3.3%	345	18	5.2%
	pol-carniv-%c	0	0	0.0%	1	0	0.0%	0	5	1.4%
	tool-burn-%b	0	3	5.6%	0	46	21.8%	1	8	2.3%
	blow-cut-%b&c	0	0	0.0%	0	0	0.0%	2	2	1.2%

TABLE 7.6-F

C2-1 / C1 Count	Count	-%-	C Total Count	Count	-%-	B6 Count	Count	-%-	B6-5 Count	Count	-%-
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--			--			--
		--	0	0	--			--			--
		--	0	0	--			--			--
25	0	0.0%	157	6	3.8%	0	0	--	0	0	--
0	0	0.0%	0	2	1.3%			--			--
0	2	8.0%	0	6	3.8%			--			--
0	0	0.0%	1	1	1.3%			--			--
135	8	5.9%	135	8	5.9%	0	0	--	0	0	--
0	1	0.7%	0	1	0.7%			--			--
1	1	0.7%	1	1	0.7%			--			--
1	1	1.5%	1	1	1.5%			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--			--			--
		--	0	0	--			--			--
		--	0	0	--			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--			--			--
		--	0	0	--			--			--
		--	0	0	--			--			--
160	8	5.0%	505	26	5.1%	30	6	20.0%	65	10	15.4%
0	1	0.6%	0	6	1.2%	0	0	0.0%	0	0	0.0%
1	3	1.9%	2	11	2.2%	0	1	3.3%	0	2	3.1%
1	1	1.3%	3	3	1.2%	0	0	0.0%	0	0	0.0%

TABLE 7.6-G

B6-4 Count	Count	-%-	B4 Count	Count	-%-	B6-3 Count	Count	-%-	B5-3 Count	Count	-%-
0	0	--	0	0	--	101	8	7.9%	1099	10	0.9%
		--			--	0	0	0.0%	0	2	0.2%
		--			--	1	0	0.0%	3	222	20.2%
		--			--	0	0	0.0%	0	0	0.0%
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
0	0	--	65	1	1.5%	0	0	--	0	0	--
		--	0	0	0.0%			--			--
		--	0	0	0.0%			--			--
		--	1	1	3.1%			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
78	6	7.7%	229	10	4.4%	101	8	7.9%	1099	10	0.9%
0	0	0.0%	0	1	0.4%	0	0	0.0%	0	2	0.2%
1	0	0.0%	0	1	0.4%	1	0	0.0%	3	222	20.2%
0	0	0.0%	3	1	1.7%	0	0	0.0%	0	0	0.0%

TABLE 7.6-H

TABLE 7.6-I

B3 Count	Count	-%-	B3-2 Count	Count	-%-	B2 Count	Count	-%-	B1 / B6-1 Count	Count	-%-
0	0	--	0	0	--	27	0	0.0%	0	0	--
		--			--	0	0	0.0%			--
		--			--	1	24	88.9%			--
		--			--	0	0	0.0%			--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
119	0	0.0%	2	0	0.0%	0	0	--	78	6	7.7%
0	0	0.0%	0	0	0.0%			--	0	0	0.0%
0	0	0.0%	0	0	0.0%			--	1	0	0.0%
0	1	0.8%	0	0	0.0%			--	0	0	0.0%
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
428	14	3.3%	59	5	8.5%	955	103	10.8%	449	46	10.2%
0	3	0.7%	0	3	5.1%	0	3	0.3%	0	0	0.0%
0	7	1.6%	0	0	0.0%	3	39	4.1%	4	12	2.7%
0	2	0.5%	1	1	3.4%	2	2	0.4%	1	2	0.7%

B Total Count	Count	-%-	B2-A Count	Count	-%-	A Count	Count	-%-	Total Count	Count	-%-
1227	18	1.5%	0	0	--	63	2	3.2%	1290	20	1.6%
0	2	0.2%			--	1	0	0.0%	1	2	0.2%
5	246	20.0%			--	3	0	0.0%	8	246	19.1%
0	0	0.0%			--	0	0	0.0%	0	0	0.0%
0	0	--	0	0	--	246	31	12.6%	569	43	7.6%
0	0	--			--	3	1	0.4%	4	3	0.5%
0	0	--			--	2	4	1.6%	2	53	9.3%
0	0	--			--	0	0	0.0%	1	1	0.4%
264	7	2.7%	477	23	4.8%	0	0	--	921	39	4.2%
0	0	0.0%	1	3	0.6%			--	1	4	0.4%
1	0	0.0%	2	7	1.5%			--	4	11	1.2%
1	2	1.1%	0	6	1.3%			--	2	9	1.2%
0	0	--	0	0	--	101	8	7.9%	101	8	7.9%
0	0	--			--	0	0	0.0%	0	0	0.0%
0	0	--			--	0	1	1.0%	0	1	1.0%
0	0	--			--	0	1	1.0%	0	1	1.0%
0	0	--	0	0	--	0	0	--	54	4	7.4%
0	0	--			--			--	0	0	0.0%
0	0	--			--			--	0	3	5.6%
0	0	--			--			--	0	0	0.0%
3193	218	6.2%	477	23	4.8%	632	84	13.3%	5372	362	6.7%
0	12	0.3%	1	3	0.6%	4	1	0.2%	6	22	0.4%
12	284	8.1%	2	7	1.5%	5	8	1.3%	21	359	6.7%
7	8	0.4%	0	6	1.3%	0	1	0.2%	10	18	0.5%

TABLE 7.6-J

Yahya VI-V Context:	Class:	VII A-VI B/A Count	Weight	Index	VI B2 Count	Weight	Index	VI B2-1 Count	Weight	Index
RUBBLE	total	0	0.0	0.0	577	6097.0	10.6	0	0.0	0.0
	med.mammal			0.0	339	1258.0	3.7			0.0
	lg.mammal			0.0	232	3832.5	16.5			0.0
	other			0.0	6	1006.5	167.8			0.0
WALLS	total	0	0.0	0.0	0	0.0	0.0	13	122.5	9.4
	med.mammal			0.0			0.0	9	26.5	2.9
	lg.mammal			0.0			0.0	4	96.0	24.0
	other			0.0			0.0	0	0.0	0.0
OCCUPATION IN	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0
OCCUPATION OUT & ASSOCIATED	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0
OCCUPATION & FILL IN	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0
OCCUPATION & FILL OUT & ASSOCIATED	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0

TABLE 7.7-A

VI B1			VI B Total			VI B1-A			VI A early		
Count	Weight	Index	Count	Weight	Index	Count	Weight	Index	Count	Weight	Index
30	423.0	14.1	607	6520.0	10.7	0	0.0	0.0	172	1962.5	11.4
9	64.0	7.1	348	1322.0	3.8			0.0	95	350.5	3.7
21	359.0	17.1	253	4191.5	16.6			0.0	77	1518.5	19.7
0	0.0	0.0	6	1006.5	167.8			0.0	0	93.5	0.0
0	0.0	0.0	13	122.5	9.4	3	22.5	7.5	16	220.0	13.8
		0.0	9	26.5	2.9	2	11.0	5.5	9	24.5	2.7
		0.0	4	96.0	24.0	1	11.5	11.5	7	195.5	27.9
		0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
23	1332.0	57.9	23	1332.0	57.9	0	0.0	0.0	0	0.0	0.0
9	18.0	2.0	9	18.0	2.0			0.0			0.0
13	1310.0	100.8	13	1310.0	100.8			0.0			0.0
1	4.0	4.0	1	4.0	4.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0

TABLE 7.7-B

VI A middle			VI A late			VI A Total			VI Total		
Count	Weight	Index	Count	Weight	Index	Count	Weight	Index	Count	Weight	Index
807	8993.0	11.1	274	3824.0	14.0	1253	14779.5	11.8	1860	21299.5	11.5
476	1521.5	3.2	131	676.0	5.2	702	2548.0	3.6	1050	3870.0	3.7
307	5954.0	19.4	138	3137.5	22.7	522	10610.0	20.3	775	14801.5	19.1
24	1517.5	63.2	5	10.5	2.1	29	1621.5	55.9	35	2628.0	75.1
0	0.0	0.0	0	0.0	0.0	16	220.0	13.8	32	365.0	11.4
		0.0			0.0	9	24.5	2.7	20	62.0	3.1
		0.0			0.0	7	195.5	27.9	12	303.0	25.3
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	23	1332.0	57.9
		0.0			0.0			0.0	9	18.0	2.0
		0.0			0.0			0.0	13	1310.0	100.8
		0.0			0.0			0.0	1	4.0	4.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0

TABLE 7.7-C

VI A/B-V C Count	Weight	Index	V C Count	Weight	Index	V B Count	Weight	Index	V A2 Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	21	85.0	4.0	11	54.5	5.0	0	0.0	0.0
		0.0	13	22.5	1.7	8	47.0	5.9			0.0
		0.0	7	62.0	8.9	3	7.5	2.5			0.0
		0.0	1	0.5	0.5	0	0.0	0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
		0.0			0.0			0.0			0.0
0	0.0	0.0	0	0.0	0.0	397	2477.5	6.2	299	1363.5	4.6
		0.0			0.0	272	880.0	3.2	204	700.5	3.4
		0.0			0.0	121	1520.0	12.6	86	601.0	7.0
		0.0			0.0	4	77.5	19.4	9	62.0	6.9
0	0.0	0.0	86	827.0	9.6	48	169.0	3.5	0	0.0	0.0
		0.0	52	208.0	4.0	36	78.5	2.2			0.0
		0.0	20	551.5	27.6	11	89.0	8.1			0.0
		0.0	14	67.5	4.8	1	1.5	1.5			0.0
0	0.0	0.0	74	484.5	6.5	0	0.0	0.0	30	124.0	4.1
		0.0	43	225.0	5.2			0.0	27	96.0	3.6
		0.0	29	251.5	8.7			0.0	3	24.5	8.2
		0.0	2	8.0	4.0			0.0	0	3.5	0.0

TABLE 7.7-D

V A1 Count	Weight	Index	V A Total Count	Weight	Index	V C/A, C/B, B/A Count	Weight	Index	V Total Count	Weight	Index
7	18.5	2.6	7	18.5	2.6	57	567.5	10.0	64	586.0	9.2
6	16.5	2.8	6	16.5	2.8	39	153.5	3.9	45	170.0	3.8
0	0.0	0.0	0	0.0	0.0	18	389.5	21.6	18	389.5	21.6
1	2.0	2.0	1	2.0	2.0	0	24.5	0.0	1	26.5	26.5
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	32	139.5	4.4
		0.0	0	0.0	0.0			0.0	21	69.5	3.3
		0.0	0	0.0	0.0			0.0	10	69.5	7.0
		0.0	0	0.0	0.0			0.0	1	0.5	0.5
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0	0	0.0	0.0			0.0	0	0.0	0.0
		0.0	0	0.0	0.0			0.0	0	0.0	0.0
		0.0	0	0.0	0.0			0.0	0	0.0	0.0
27	157.5	5.8	326	1521.0	4.7	39	84.5	2.2	762	4083.0	5.4
19	57.5	3.0	223	758.0	3.4	30	49.0	1.6	525	1687.0	3.2
7	98.5	14.1	93	699.5	7.5	8	32.0	4.0	222	2251.5	10.1
1	1.5	1.5	10	63.5	6.4	1	3.5	3.5	15	144.5	9.6
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	134	996.0	7.4
		0.0	0	0.0	0.0			0.0	88	286.5	3.3
		0.0	0	0.0	0.0			0.0	31	640.5	20.7
		0.0	0	0.0	0.0			0.0	15	69.0	4.6
135	817.5	6.1	165	941.5	5.7	0	0.0	0.0	239	1426.0	6.0
103	541.5	5.3	130	637.5	4.9			0.0	173	862.5	5.0
24	269.0	11.2	27	293.5	10.9			0.0	56	545.0	9.7
8	7.0	0.9	8	10.5	1.3			0.0	10	18.5	1.9

TABLE 7.7-E

Yahya VI-V		VII A-VI B/A			VI B2			VI B2-1		
Context:	Class:	Count	Weight	Index	Count	Weight	Index	Count	Weight	Index
MIDDEN	total	0	0.0	0.0	576	3716.0	6.5	0	0.0	0.0
	med.mammal			0.0	449	1588.0	3.5			0.0
	lg.mammal			0.0	122	2054.0	16.8			0.0
	other			0.0	5	74.0	14.8			0.0
ROOM FILL IN & ASSOCIATED	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0
UNDIFFER-ENTIATED FILL OUT	total	288	3648.5	12.7	117	1504.5	12.9	0	0.0	0.0
	med.mammal	169	704.5	4.2	77	323.0	4.2			0.0
	lg.mammal	118	2633.5	22.3	37	1117.0	30.2			0.0
	other	1	310.5	310.5	3	64.5	21.5			0.0
PLATFORM OR LEVELING	total	0	0.0	0.0	40	215.0	5.4	11	425.0	38.6
	med.mammal			0.0	32	88.0	2.8	2	54.5	27.3
	lg.mammal			0.0	8	114.5	14.3	9	370.5	41.2
	other			0.0	0	12.5	0.0	0	0.0	0.0
MIXED OR OTHER	total	117	1262.5	10.8	0	0.0	0.0	140	1170.5	8.4
	med.mammal	59	318.5	5.4			0.0	75	294.0	3.9
	lg.mammal	54	930.0	17.2			0.0	65	821.5	12.6
	other	4	14.0	3.5			0.0	0	55.0	0.0
TOTAL	total	405	4911.0	12.1	1310	11532.5	8.8	164	1718.0	10.5
	med.mammal	228	1023.0	4.5	897	3257.0	3.6	86	375.0	4.4
	lg.mammal	172	3563.5	20.7	399	7118.0	17.8	78	1288.0	16.5
	other	5	324.5	64.9	14	1157.5	82.7	0	55.0	0.0

TABLE 7.7-F

VI B1			VI B Total			VI B1-A			VI A early		
Count	Weight	Index	Count	Weight	Index	Count	Weight	Index	Count	Weight	Index
0	0.0	0.0	576	3716.0	6.5	0	0.0	0.0	0	0.0	0.0
		0.0	449	1588.0	3.5			0.0			0.0
		0.0	122	2054.0	16.8			0.0			0.0
		0.0	5	74.0	14.8			0.0			0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0	0	0.0	0.0			0.0			0.0
		0.0	0	0.0	0.0			0.0			0.0
		0.0	0	0.0	0.0			0.0			0.0
130	1503.0	11.6	247	3007.5	12.2	0	0.0	0.0	0	0.0	0.0
87	357.0	4.1	164	680.0	4.1			0.0			0.0
43	1146.0	26.7	80	2263.0	28.3			0.0			0.0
0	0.0	0.0	3	64.5	21.5			0.0			0.0
0	0.0	0.0	51	640.0	12.5	26	257.5	9.9	0	0.0	0.0
		0.0	34	142.5	4.2	23	204.5	8.9			0.0
		0.0	17	485.0	28.5	3	53.0	17.7			0.0
		0.0	0	12.5	0.0	0	0.0	0.0			0.0
0	0.0	0.0	140	1170.5	8.4	34	578.5	17.0	0	0.0	0.0
		0.0	75	294.0	3.9	13	42.0	3.2			0.0
		0.0	65	821.5	12.6	21	536.5	25.5			0.0
		0.0	0	55.0	0.0	0	0.0	0.0			0.0
183	3258.0	17.8	1657	16508.5	10.0	63	858.5	13.6	188	2182.5	11.6
105	439.0	4.2	1088	4071.0	3.7	38	257.5	6.8	104	375.0	3.6
77	2815.0	36.6	554	11221.0	20.3	25	601.0	24.0	84	1714.0	20.4
1	4.0	4.0	15	1216.5	81.1	0	0.0	0.0	0	93.5	0.0

TABLE 7.7-G

VI A middle			VI A late			VI A Total			VI Total		
Count	Weight	Index	Count	Weight	Index	Count	Weight	Index	Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	576	3716.0	6.5
		0.0			0.0	0	0.0	0.0	449	1588.0	3.5
		0.0			0.0	0	0.0	0.0	122	2054.0	16.8
		0.0			0.0	0	0.0	0.0	5	74.0	14.8
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
12	301.0	25.1	0	0.0	0.0	12	301.0	25.1	259	3308.5	12.8
3	25.5	8.5			0.0	3	25.5	8.5	167	705.5	4.2
9	275.5	30.6			0.0	9	275.5	30.6	89	2538.5	28.5
0	0.0	0.0			0.0	0	0.0	0.0	3	64.5	21.5
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	77	897.5	11.7
		0.0			0.0	0	0.0	0.0	57	347.0	6.1
		0.0			0.0	0	0.0	0.0	20	538.0	26.9
		0.0			0.0	0	0.0	0.0	0	12.5	0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	174	1749.0	10.1
		0.0			0.0	0	0.0	0.0	88	336.0	3.8
		0.0			0.0	0	0.0	0.0	86	1358.0	15.8
		0.0			0.0	0	0.0	0.0	0	55.0	0.0
819	9294.0	11.3	274	3824.0	14.0	1281	15300.5	11.9	3001	32667.5	10.9
479	1547.0	3.2	131	676.0	5.2	714	2598.0	3.6	1840	6926.5	3.8
316	6229.5	19.7	138	3137.5	22.7	538	11081.0	20.6	1117	22903.0	20.5
24	1517.5	63.2	5	10.5	2.1	29	1621.5	55.9	44	2838.0	64.5

TABLE 7.7-H

VI A/B-V C Count	Weight	Index	V C Count	Weight	Index	V B Count	Weight	Index	V A2 Count	Weight	Index
0	0.0	0.0	27	224.5	8.3	48	595.5	12.4	0	0.0	0.0
		0.0	17	63.5	3.7	22	119.5	5.4			0.0
		0.0	10	143.0	14.3	22	418.5	19.0			0.0
		0.0	0	18.0	0.0	4	57.5	14.4			0.0
0	0.0	0.0	16	99.0	6.2	0	0.0	0.0	0	0.0	0.0
		0.0	8	21.5	2.7			0.0			0.0
		0.0	8	77.5	9.7			0.0			0.0
		0.0	0	0.0	0.0			0.0			0.0
10	393.5	39.4	59	323.0	5.5	1	5.5	5.5	0	0.0	0.0
0	0.0	0.0	43	113.0	2.6	0	0.0	0.0			0.0
10	393.5	39.4	16	206.0	12.9	1	5.5	5.5			0.0
0	0.0	0.0	0	4.0	0.0	0	0.0	0.0			0.0
111	653.0	5.9	93	573.0	6.2	0	0.0	0.0	0	0.0	0.0
80	309.5	3.9	69	272.0	3.9			0.0			0.0
28	330.5	11.8	24	246.0	10.3			0.0			0.0
3	13.0	4.3	0	55.0	0.0			0.0			0.0
0	0.0	0.0	12	231.0	19.3	0	0.0	0.0	0	0.0	0.0
		0.0	5	11.0	2.2			0.0			0.0
		0.0	7	220.0	31.4			0.0			0.0
		0.0	0	0.0	0.0			0.0			0.0
121	1046.5	8.6	388	2847.0	7.3	505	3302.0	6.5	329	1487.5	4.5
80	309.5	3.9	250	936.5	3.7	338	1125.0	3.3	231	796.5	3.4
38	724.0	19.1	121	1757.5	14.5	158	2040.5	12.9	89	625.5	7.0
3	13.0	4.3	17	153.0	9.0	9	136.5	15.2	9	65.5	7.3

TABLE 7.7-I

V Al Count	Weight	Index	V A Total Count	Weight	Index	V C/A, C/B, B/A Count	Weight	Index	V Total Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	75	820.0	10.9
		0.0	0	0.0	0.0			0.0	39	183.0	4.7
		0.0	0	0.0	0.0			0.0	32	561.5	17.5
		0.0	0	0.0	0.0			0.0	4	75.5	18.9
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	16	99.0	6.2
		0.0	0	0.0	0.0			0.0	8	21.5	2.7
		0.0	0	0.0	0.0			0.0	8	77.5	9.7
		0.0	0	0.0	0.0			0.0	0	0.0	0.0
50	626.5	12.5	50	626.5	12.5	122	502.5	4.1	232	1457.5	6.3
29	90.5	3.1	29	90.5	3.1	96	238.0	2.5	168	441.5	2.6
19	519.5	27.3	19	519.5	27.3	26	264.5	10.2	62	995.5	16.1
2	16.5	8.3	2	16.5	8.3	0	0.0	0.0	2	20.5	10.3
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	93	573.0	6.2
		0.0	0	0.0	0.0			0.0	69	272.0	3.9
		0.0	0	0.0	0.0			0.0	24	246.0	10.3
		0.0	0	0.0	0.0			0.0	0	55.0	0.0
220	2832.5	12.9	220	2832.5	12.9	0	0.0	0.0	232	3063.5	13.2
149	482.0	3.2	149	482.0	3.2			0.0	154	493.0	3.2
57	2301.5	40.4	57	2301.5	40.4			0.0	64	2521.5	39.4
14	49.0	3.5	14	49.0	3.5			0.0	14	49.0	3.5
439	4452.5	10.1	768	5940.0	7.7	218	1154.5	5.3	1879	13243.5	7.0
306	1188.0	3.9	537	1984.5	3.7	165	440.5	2.7	1290	4486.5	3.5
107	3188.5	29.8	196	3814.0	19.5	52	636.0	13.2	527	8298.0	15.7
26	76.0	2.9	35	141.5	4.0	1	28.0	28.0	62	459.0	7.4

TABLE 7.7-J

Yahya VI-V Context:		VII A-VI B/A Count	Count	--%--	VI B2 Count	Count	--%--	VI B2-1 Count	Count	--%--
RUBBLE	O-O&C-%O/C	0	0	--	7	73	62.9%	0	0	--
	C-Bos-%Bos			--	18	37	31.9%			--
	O/C-oth-%oth			--	48	6	5.2%			--
	Av/Rp-Tot-%O		0	--	5	116	28.0%		0	--
WALLS	O-O&C-%O/C	0	0	--	0	0	--	0	2	66.7%
	C-Bos-%Bos			--			--	2	1	33.3%
	O/C-oth-%oth			--			--	0	0	0.0%
	Av/Rp-Tot-%O		0	--		0	--	0	3	0.0%
OCCUPATION IN	O-O&C-%O/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	O/C-oth-%oth			--			--			--
	Av/Rp-Tot-%O		0	--		0	--		0	--
OCCUPATION OUT & ASSOCIATED	O-O&C-%O/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	O/C-oth-%oth			--			--			--
	Av/Rp-Tot-%O		0	--		0	--		0	--
OCCUPATION & FILL IN	O-O&C-%O/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	O/C-oth-%oth			--			--			--
	Av/Rp-Tot-%O		0	--		0	--		0	--
OCCUPATION & FILL OUT & ASSOCIATED	O-O&C-%O/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	O/C-oth-%oth			--			--			--
	Av/Rp-Tot-%O		0	--		0	--		0	--

TABLE 7.8-A

VI B1 Count	Count	--%--	VI B Total Count	Count	--%--	VI B1-A Count	Count	--%--	VI A early Count	Count	--%--
0	5	55.6%	7	78	62.4%	0	0	--	1	20	51.3%
0	4	44.4%	18	41	32.8%			--	3	15	38.5%
5	0	0.0%	53	6	4.8%			--	16	4	10.3%
0	9	--	5	125	28.0%		0	--	0	39	25.0%
0	0	--	0	2	66.7%	0	1	50.0%	0	0	0.0%
		--	2	1	33.3%	0	1	50.0%	0	4	100.0%
		--	0	0	0.0%	1	0	0.0%	0	0	0.0%
	0	--	0	3	0.0%	0	2	--	0	4	--
1	2	16.7%	1	2	16.7%	0	0	--	0	0	--
0	9	75.0%	0	9	75.0%			--			--
1	1	8.3%	1	1	8.3%			--			--
0	12	100.0%	0	12	100.0%		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--			--			--
		--	0	0	--			--			--
	0	--	0	0	--		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--			--			--
		--	0	0	--			--			--
	0	--	0	0	--		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--			--			--
		--	0	0	--			--			--
	0	--	0	0	--		0	--		0	--

TABLE 7.8-B

VI A middle Count	Count	--%--	VI A late Count	Count	--%--	VI A Total Count	Count	--%--	VI Total Count	Count	--%--
9	85	50.6%	2	35	42.7%	12	140	48.4%	19	218	52.7%
12	80	47.6%	7	41	50.0%	22	136	47.1%	40	177	42.8%
64	3	1.8%	26	6	7.3%	106	13	4.5%	159	19	4.6%
1	168	42.9%	0	82	22.2%	1	289	35.3%	6	414	32.2%
0	0	--	0	0	--	0	0	0.0%	0	3	33.3%
		--			--	0	4	100.0%	2	6	66.7%
		--			--	0	0	0.0%	1	0	0.0%
	0	--		0	--	0	4	--	0	9	0.0%
0	0	--	0	0	--	0	0	--	1	2	16.7%
		--			--	0	0	--	0	9	75.0%
		--			--	0	0	--	1	1	8.3%
	0	--		0	--	0	0	--	0	12	100.0%
0	0	--	0	0	--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
	0	--		0	--	0	0	--	0	0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
	0	--		0	--	0	0	--	0	0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
	0	--		0	--	0	0	--	0	0	--

TABLE 7.8-C

VI A/B-V C Count	Count	--%--	V C Count	Count	--%--	V B Count	Count	--%--	V A2 Count	Count	--%--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	0	--	0	3	60.0%	1	4	100.0%	0	0	--
		--	2	2	40.0%	1	0	0.0%			--
		--	1	0	0.0%	2	0	0.0%			--
	0	--	0	5	0.0%	0	4	50.0%		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
	0	--		0	--		0	--		0	--
0	0	--	0	0	--	13	70	76.1%	12	59	88.1%
		--			--	21	19	20.7%	18	7	10.4%
		--			--	36	3	3.3%	29	1	1.5%
	0	--		0	--	1	92	38.2%	0	67	40.0%
0	0	--	3	17	44.7%	3	8	72.7%	0	0	--
		--	5	9	23.7%	3	3	27.3%			--
		--	9	12	31.6%	2	0	0.0%			--
	0	--	0	38	37.5%	0	11	50.0%		0	--
0	0	--	0	12	85.7%	0	0	--	0	6	75.0%
		--	2	1	7.1%			--	0	2	25.0%
		--	10	1	7.1%			--	6	0	0.0%
	0	--	0	14	0.0%		0	--	0	8	--

TABLE 7.8-D

V A1			V A Total			V C/A, C/B, B/A			V Total		
Count	Count	--%--	Count	Count	--%--	Count	Count	--%--	Count	Count	--%--
2	3	75.0%	2	3	75.0%	0	10	71.4%	2	13	72.2%
0	0	0.0%	0	0	0.0%	4	3	21.4%	4	3	16.7%
1	1	25.0%	1	1	25.0%	6	1	7.1%	7	2	11.1%
0	4	100.0%	0	4	100.0%	0	14	0.0%	0	18	33.3%
0	0	--	0	0	--	0	0	--	1	7	77.8%
		--	0	0	--			--	3	2	22.2%
		--	0	0	--			--	3	0	0.0%
	0	--	0	0	--		0	--	0	9	25.0%
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--			--	0	0	--
		--	0	0	--			--	0	0	--
	0	--	0	0	--		0	--	0	0	--
0	2	100.0%	12	61	88.4%	0	4	100.0%	25	135	81.8%
0	0	0.0%	18	7	10.1%	2	0	0.0%	41	26	15.8%
2	0	0.0%	31	1	1.4%	2	0	0.0%	69	4	2.4%
0	2	--	0	69	40.0%	0	4	0.0%	1	165	37.9%
0	0	--	0	0	--	0	0	--	6	25	51.0%
		--	0	0	--			--	8	12	24.5%
		--	0	0	--			--	11	12	24.5%
	0	--	0	0	--		0	--	0	49	42.9%
10	36	87.8%	10	42	85.7%	0	0	--	10	54	85.7%
12	4	9.8%	12	6	12.2%			--	14	7	11.1%
14	1	2.4%	20	1	2.0%			--	30	2	3.2%
1	41	45.5%	1	49	45.5%		0	--	1	63	41.7%

TABLE 7.8-E

TABLE 7.8-F

Yahya VI-V Context:		VII A-VI B/A Count	Count	--%--	VI B2 Count	Count	--%--	VI B2-1 Count	Count	--%--
MIDDEN	O-O&C-%O/C	0	0	--	24	138	80.2%	0	0	--
	C-Bos-%Bos			--	28	29	16.9%			--
	O/C-oth-%oth			--	86	5	2.9%			--
	Av/Rp-Tot-%O		0	--	4	172	46.2%		0	--
ROOM FILL IN & ASSOCIATED	O-O&C-%O/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	O/C-oth-%oth			--			--			--
	Av/Rp-Tot-%O		0	--		0	--		0	--
UNDIFFER-ENTIATED FILL OUT	O-O&C-%O/C	11	43	56.6%	1	22	59.5%	0	0	--
	C-Bos-%Bos	10	28	36.8%	8	13	35.1%			--
	O/C-oth-%oth	22	5	6.6%	13	2	5.4%			--
	Av/Rp-Tot-%O	5	76	52.4%	2	37	11.1%		0	--
PLATFORM OR LEVELING	O-O&C-%O/C	0	0	--	0	3	75.0%	0	1	16.7%
	C-Bos-%Bos			--	1	1	25.0%	0	4	66.7%
	O/C-oth-%oth			--	2	0	0.0%	1	1	16.7%
	Av/Rp-Tot-%O		0	--	0	4	0.0%	0	6	--
MIXED OR OTHER	O-O&C-%O/C	6	19	43.2%	0	0	--	1	12	48.0%
	C-Bos-%Bos	5	24	54.5%			--	4	11	44.0%
	O/C-oth-%oth	8	1	2.3%			--	7	2	8.0%
	Av/Rp-Tot-%O	0	44	54.5%		0	--	0	25	20.0%
TOTAL	O-O&C-%O/C	17	62	51.7%	32	236	71.7%	1	15	44.1%
	C-Bos-%Bos	15	52	43.3%	55	80	24.3%	6	16	47.1%
	O/C-oth-%oth	30	6	5.0%	149	13	4.0%	8	3	8.8%
	Av/Rp-Tot-%O	5	120	53.1%	11	329	36.8%	0	34	14.3%

VI B1 Count	Count	--%--	VI B Total Count	Count	--%--	VI B1-A Count	Count	--%--	VI A early Count	Count	--%--
0	0	--	24	138	80.2%	0	0	--	0	0	--
		--	28	29	16.9%			--			--
		--	86	5	2.9%			--			--
	0	--	4	172	46.2%		0	--		0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--			--			--
		--	0	0	--			--			--
	0	--	0	0	--		0	--		0	--
3	23	65.7%	4	45	62.5%	0	0	--	0	0	--
8	12	34.3%	16	25	34.7%			--			--
12	0	0.0%	25	2	2.8%			--			--
0	35	27.3%	2	72	20.0%		0	--		0	--
0	0	--	0	4	40.0%	4	17	94.4%	0	0	--
		--	1	5	50.0%	10	1	5.6%			--
		--	3	1	10.0%	3	0	0.0%			--
	0	--	0	10	0.0%	0	18	28.6%		0	--
0	0	--	1	12	48.0%	0	1	33.3%	0	0	--
		--	4	11	44.0%	0	2	66.7%			--
		--	7	2	8.0%	1	0	0.0%			--
	0	--	0	25	20.0%	0	3	--		0	--
4	30	53.6%	37	281	67.1%	4	19	82.6%	1	20	46.5%
8	25	44.6%	69	121	28.9%	10	4	17.4%	3	19	44.2%
18	1	1.8%	175	17	4.1%	5	0	0.0%	16	4	9.3%
0	56	33.3%	11	419	34.9%	0	23	28.6%	0	43	25.0%

TABLE 7.8-G

TABLE 7.8-H

VI A middle Count	Count	--%--	VI A late Count	Count	--%--	VI A Total Count	Count	--%--	VI Total Count	Count	--%--
0	0	--	0	0	--	0	0	--	24	138	80.2%
		--			--	0	0	--	28	29	16.9%
		--			--	0	0	--	86	5	2.9%
	0	--		0	--	0	0	--	4	172	46.2%
0	0	--	0	0	--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
	0	--		0	--	0	0	--	0	0	--
1	1	33.3%	0	0	--	1	1	33.3%	5	46	61.3%
0	2	66.7%			--	0	2	66.7%	16	27	36.0%
0	0	0.0%			--	0	0	0.0%	25	2	2.7%
0	3	100.0%		0	--	0	3	100.0%	2	75	23.8%
0	0	--	0	0	--	0	0	--	4	21	75.0%
		--			--	0	0	--	11	6	21.4%
		--			--	0	0	--	6	1	3.6%
	0	--		0	--	0	0	--	0	28	26.7%
0	0	--	0	0	--	0	0	--	1	13	46.4%
		--			--	0	0	--	4	13	46.4%
		--			--	0	0	--	8	2	7.1%
	0	--		0	--	0	0	--	0	28	20.0%
10	86	50.3%	2	35	42.7%	13	141	47.6%	54	441	59.8%
12	82	48.0%	7	41	50.0%	22	142	48.0%	101	267	36.2%
64	3	1.8%	26	6	7.3%	106	13	4.4%	286	30	4.1%
1	171	45.5%	0	82	22.2%	1	296	37.1%	12	738	34.8%

VI A/B-V C Count	Count	--%--	V C Count	Count	--%--	V B Count	Count	--%--	V A2 Count	Count	--%--
0	0	--	1	5	71.4%	0	6	42.9%	0	0	--
		--	0	2	28.6%	1	7	50.0%			--
		--	4	0	0.0%	5	1	7.1%			--
	0	--	0	7	100.0%	0	14	0.0%		0	--
0	0	--	1	2	100.0%	0	0	--	0	0	--
		--	0	0	0.0%			--			--
		--	1	0	0.0%			--			--
	0	--	0	2	100.0%		0	--		0	--
0	0	0.0%	1	7	70.0%	0	0	--	0	0	--
0	5	100.0%	2	3	30.0%	0	0	--			--
0	0	0.0%	4	0	0.0%	0	0	--			--
0	5	--	1	10	33.3%	0	0	--		0	--
3	26	78.8%	3	19	79.2%	0	0	--	0	0	--
6	7	21.2%	7	2	8.3%			--			--
17	0	0.0%	9	3	12.5%			--			--
0	33	33.3%	1	24	30.0%		0	--		0	--
0	0	--	0	1	33.3%	0	0	--	0	0	--
		--	0	2	66.7%			--			--
		--	1	0	0.0%			--			--
	0	--	0	3	--		0	--		0	--
3	26	68.4%	9	66	64.1%	17	88	72.7%	12	65	86.7%
6	12	31.6%	18	21	20.4%	26	29	24.0%	18	9	12.0%
17	0	0.0%	39	16	15.5%	45	4	3.3%	35	1	1.3%
0	38	33.3%	2	103	33.3%	1	121	39.5%	0	75	40.0%

TABLE 7.8-I

V A1 Count	Count	--%--	V A Total Count	Count	--%--	V C/A, C/B, B/A Count	Count	--%--	V Total Count	Count	--%--
0	0	--	0	0	--	0	0	--	1	11	52.4%
		--	0	0	--			--	1	9	42.9%
		--	0	0	--			--	9	1	4.8%
	0	--	0	0	--		0	--	0	21	50.0%
0	0	--	0	0	--	0	0	--	1	2	100.0%
		--	0	0	--			--	0	0	0.0%
		--	0	0	--			--	1	0	0.0%
	0	--	0	0	--		0	--	0	2	100.0%
0	7	87.5%	0	7	87.5%	4	18	85.7%	5	32	82.1%
2	1	12.5%	2	1	12.5%	5	3	14.3%	9	7	17.9%
5	0	0.0%	5	0	0.0%	9	0	0.0%	18	0	0.0%
0	8	0.0%	0	8	0.0%	0	21	44.4%	1	39	35.7%
0	0	--	0	0	--	0	0	--	3	19	79.2%
		--	0	0	--			--	7	2	8.3%
		--	0	0	--			--	9	3	12.5%
	0	--	0	0	--		0	--	1	24	30.0%
2	43	75.4%	2	43	75.4%	0	0	--	2	44	73.3%
15	11	19.3%	15	11	19.3%			--	15	13	21.7%
26	3	5.3%	26	3	5.3%			--	27	3	5.0%
1	57	11.8%	1	57	11.8%		0	--	1	60	11.8%
14	91	81.3%	26	156	83.4%	4	32	82.1%	56	342	76.0%
29	16	14.3%	47	25	13.4%	11	6	15.4%	102	81	18.0%
48	5	4.5%	83	6	3.2%	17	1	2.6%	184	27	6.0%
2	112	32.6%	2	187	35.6%	0	39	26.7%	5	450	35.4%

TABLE 7.8-J

Yahya VI-V Context:		VII A-VI B/A Count	Count	-%-	VI B2 Count	Count	-%-	VI B2-1 Count	Count	-%-
RUBBLE	tot-rodent-%r	0	0	--	577	16	2.8%	0	0	--
	pol-carniv-%c			--	0	4	0.7%			--
	tool-burn-%b			--	1	9	1.6%			--
	blow-cut-%b&c			--	2	3	0.9%			--
WALLS	tot-rodent-%r	0	0	--	0	0	--	13	3	23.1%
	pol-carniv-%c			--			--	0	0	0.0%
	tool-burn-%b			--			--	0	0	0.0%
	blow-cut-%b&c			--			--	0	0	0.0%
OCCUPATION IN	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--
OCCUPATION OUT & ASSOCIATED	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--
OCCUPATION & FILL IN	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--
OCCUPATION & FILL OUT & ASSOCIATED	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--

TABLE 7.9-A

VI B1 Count	Count	-%-	VI B Total Count	Count	-%-	VI B1-A Count	Count	-%-	VI A early Count	Count	-%-
30	1	3.3%	607	17	2.8%	0	0	--	172	9	5.2%
0	0	0.0%	0	4	0.7%			--	2	5	2.9%
0	0	0.0%	1	9	1.5%			--	0	1	0.6%
0	1	3.3%	2	4	1.0%			--	0	2	1.2%
0	0	--	13	3	23.1%	3	1	33.3%	16	0	0.0%
		--	0	0	0.0%	0	0	0.0%	0	1	6.3%
		--	0	0	0.0%	0	0	0.0%	0	1	6.3%
		--	0	0	0.0%	0	0	0.0%	0	0	0.0%
23	0	0.0%	23	0	0.0%	0	0	--	0	0	--
0	0	0.0%	0	0	0.0%			--			--
5	0	0.0%	5	0	0.0%			--			--
0	0	0.0%	0	0	0.0%			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--			--			--
		--	0	0	--			--			--
		--	0	0	--			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--			--			--
		--	0	0	--			--			--
		--	0	0	--			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--			--			--
		--	0	0	--			--			--
		--	0	0	--			--			--

TABLE 7.9-B

VI A middle Count	Count	-%-	VI A late Count	Count	-%-	VI A Total Count	Count	-%-	VI Total Count	Count	-%-
807	27	3.3%	274	9	3.3%	1253	45	3.6%	1860	62	3.3%
1	5	0.6%	1	6	2.2%	4	16	1.3%	4	20	1.1%
3	8	1.0%	3	4	1.5%	6	13	1.0%	7	22	1.2%
1	4	0.6%	0	6	2.2%	1	12	1.0%	3	16	1.0%
0	0	--	0	0	--	16	0	0.0%	32	4	12.5%
		--			--	0	1	6.3%	0	1	3.1%
		--			--	0	1	6.3%	0	1	3.1%
		--			--	0	0	0.0%	0	0	0.0%
0	0	--	0	0	--	0	0	--	23	0	0.0%
		--			--	0	0	--	0	0	0.0%
		--			--	0	0	--	5	0	0.0%
		--			--	0	0	--	0	0	0.0%
0	0	--	0	0	--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--

TABLE 7.9-C

VI A/B-V C Count	Count	-%-	V C Count	Count	-%-	V B Count	Count	-%-	V A2 Count	Count	-%-
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
0	0	--	21	1	4.8%	11	3	27.3%	0	0	--
		--	0	0	0.0%	0	0	0.0%			--
		--	0	0	0.0%	0	0	0.0%			--
		--	0	0	0.0%	0	1	9.1%			--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--			--			--
		--			--			--			--
		--			--			--			--
0	0	--	0	0	--	397	33	8.3%	299	35	11.7%
		--			--	0	5	1.3%	0	2	0.7%
		--			--	2	7	1.8%	1	1	0.3%
		--			--	2	7	2.3%	1	5	2.0%
0	0	--	86	22	25.6%	48	7	14.6%	0	0	--
		--	0	0	0.0%	0	1	2.1%			--
		--	0	3	3.5%	0	0	0.0%			--
		--	0	1	1.2%	0	0	0.0%			--
0	0	--	74	11	14.9%	0	0	--	30	1	3.3%
		--	0	1	1.4%			--	0	0	0.0%
		--	0	1	1.4%			--	0	1	3.3%
		--	0	3	4.1%			--	0	0	0.0%

TABLE 7.9-D

V A1 Count	Count	-%-	V A Total Count	Count	-%-	V C/A, C/B, B/A Count	Count	-%-	V Total Count	Count	-%-
7	2	28.6%	7	2	28.6%	57	4	7.0%	64	6	9.4%
0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
0	0	0.0%	0	0	0.0%	1	3	5.3%	1	3	4.7%
0	0	0.0%	0	0	0.0%	1	0	1.8%	1	0	1.6%
0	0	--	0	0	--	0	0	--	32	4	12.5%
		--	0	0	--			--	0	0	0.0%
		--	0	0	--			--	0	0	0.0%
		--	0	0	--			--	0	1	3.1%
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--			--	0	0	--
		--	0	0	--			--	0	0	--
		--	0	0	--			--	0	0	--
27	5	18.5%	326	40	12.3%	39	1	2.6%	762	74	9.7%
0	0	0.0%	0	2	0.6%	0	0	0.0%	0	7	0.9%
0	0	0.0%	1	1	0.3%	0	1	2.6%	3	9	1.2%
0	0	0.0%	1	5	1.8%	0	1	2.6%	3	13	2.1%
0	0	--	0	0	--	0	0	--	134	29	21.6%
		--	0	0	--			--	0	1	0.7%
		--	0	0	--			--	0	3	2.2%
		--	0	0	--			--	0	1	0.7%
135	27	20.0%	165	28	17.0%	0	0	--	239	39	16.3%
0	0	0.0%	0	0	0.0%			--	0	1	0.4%
0	2	1.5%	0	3	1.8%			--	0	4	1.7%
0	4	3.0%	0	4	2.4%			--	0	7	2.9%

TABLE 7.9-E

TABLE 7.9-F

Yahya VI-V Context:		VII A-VI B/A Count	Count	-%-	VI B2 Count	Count	-%-	VI B2-1 Count	Count	-%-
MIDDEN	tot-rodent-%r	0	0	--	576	103	17.9%	0	0	--
	pol-carniv-%c			--	1	1	0.2%			--
	tool-burn-%b			--	2	15	2.6%			--
	blow-cut-%b&c			--	0	1	0.2%			--
ROOM FILL IN & ASSOCIATED	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--
UNDIFFER-ENTIATED FILL OUT	tot-rodent-%r	288	12	4.2%	117	8	6.8%	0	0	--
	pol-carniv-%c	1	2	0.7%	0	0	0.0%			--
	tool-burn-%b	2	5	1.7%	0	0	0.0%			--
	blow-cut-%b&c	1	6	2.4%	0	2	1.7%			--
PLATFORM OR LEVELING	tot-rodent-%r	0	0	--	40	0	0.0%	11	1	9.1%
	pol-carniv-%c			--	0	0	0.0%	0	0	0.0%
	tool-burn-%b			--	0	1	2.5%	0	0	0.0%
	blow-cut-%b&c			--	0	0	0.0%	0	1	9.1%
MIXED OR OTHER	tot-rodent-%r	117	6	5.1%	0	0	--	140	4	2.9%
	pol-carniv-%c	0	3	2.6%			--	0	3	2.1%
	tool-burn-%b	0	3	2.6%			--	0	2	1.4%
	blow-cut-%b&c	0	1	0.9%			--	0	5	3.6%
TOTAL	tot-rodent-%r	405	18	4.4%	1310	127	9.7%	164	8	4.9%
	pol-carniv-%c	1	5	1.2%	1	5	0.4%	0	3	1.8%
	tool-burn-%b	2	8	2.0%	3	25	1.9%	0	2	1.2%
	blow-cut-%b&c	1	7	2.0%	2	6	0.6%	0	6	3.7%

VI B1 Count	Count	-%-	VI B Total Count	Count	-%-	VI B1-A Count	Count	-%-	VI A early Count	Count	-%-
0	0	--	576	103	17.9%	0	0	--	0	0	--
		--	1	1	0.2%			--			--
		--	2	15	2.6%			--			--
		--	0	1	0.2%			--			--
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--			--			--
		--	0	0	--			--			--
		--	0	0	--			--			--
130	10	7.7%	247	18	7.3%	0	0	--	0	0	--
2	0	0.0%	2	0	0.0%			--			--
1	4	3.1%	1	4	1.6%			--			--
0	2	1.5%	0	4	1.6%			--			--
0	0	--	51	1	2.0%	26	5	19.2%	0	0	--
		--	0	0	0.0%	1	0	0.0%			--
		--	0	1	2.0%	0	1	3.8%			--
		--	0	1	2.0%	0	1	3.8%			--
0	0	--	140	4	2.9%	34	2	5.9%	0	0	--
		--	0	3	2.1%	0	0	0.0%			--
		--	0	2	1.4%	0	1	2.9%			--
		--	0	5	3.6%	0	0	0.0%			--
183	11	6.0%	1657	146	8.8%	63	8	12.7%	188	9	4.8%
2	0	0.0%	3	8	0.5%	1	0	0.0%	2	6	3.2%
6	4	2.2%	9	31	1.9%	0	2	3.2%	0	2	1.1%
0	3	1.6%	2	15	1.0%	0	1	1.6%	0	2	1.1%

TABLE 7.9-G

TABLE 7.9-H

VI A middle Count	Count	-%-	VI A late Count	Count	-%-	VI A Total Count	Count	-%-	VI Total Count	Count	-%-
0	0	--	0	0	--	0	0	--	576	103	17.9%
		--			--	0	0	--	1	1	0.2%
		--			--	0	0	--	2	15	2.6%
		--			--	0	0	--	0	1	0.2%
0	0	--	0	0	--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
12	3	25.0%	0	0	--	12	3	25.0%	259	21	8.1%
0	0	0.0%			--	0	0	0.0%	2	0	0.0%
0	0	0.0%			--	0	0	0.0%	1	4	1.5%
0	1	8.3%			--	0	1	8.3%	0	5	1.9%
0	0	--	0	0	--	0	0	--	77	6	7.8%
		--			--	0	0	--	1	0	0.0%
		--			--	0	0	--	0	2	2.6%
		--			--	0	0	--	0	2	2.6%
0	0	--	0	0	--	0	0	--	174	6	3.4%
		--			--	0	0	--	0	3	1.7%
		--			--	0	0	--	0	3	1.7%
		--			--	0	0	--	0	5	2.9%
819	30	3.7%	274	9	3.3%	1281	48	3.7%	3001	202	6.7%
1	5	0.6%	1	6	2.2%	4	17	1.3%	8	25	0.8%
3	8	1.0%	3	4	1.5%	6	14	1.1%	15	47	1.6%
1	5	0.7%	0	6	2.2%	1	13	1.1%	3	29	1.1%

VI A/B-V C Count	Count	-%-	V C Count	Count	-%-	V B Count	Count	-%-	V A2 Count	Count	-%-
0	0	--	27	1	3.7%	48	5	10.4%	0	0	--
		--	1	0	0.0%	0	1	2.1%			--
		--	0	0	0.0%	0	1	2.1%			--
		--	0	2	7.4%	0	1	2.1%			--
0	0	--	16	0	0.0%	0	0	--	0	0	--
		--	0	0	0.0%			--			--
		--	0	0	0.0%			--			--
		--	0	0	0.0%			--			--
10	0	0.0%	59	1	1.7%	1	0	0.0%	0	0	--
0	0	0.0%	0	1	1.7%	0	0	0.0%			--
0	0	0.0%	0	3	5.1%	0	0	0.0%			--
0	0	0.0%	0	2	3.4%	0	0	0.0%			--
111	15	13.5%	93	13	14.0%	0	0	--	0	0	--
0	3	2.7%	0	0	0.0%			--			--
2	3	2.7%	0	3	3.2%			--			--
0	1	0.9%	0	1	1.1%			--			--
0	0	--	12	0	0.0%	0	0	--	0	0	--
		--	0	0	0.0%			--			--
		--	0	0	0.0%			--			--
		--	0	0	0.0%			--			--
121	15	12.4%	388	49	12.6%	505	48	9.5%	329	36	10.9%
0	3	2.5%	1	2	0.5%	0	7	1.4%	0	2	0.6%
2	3	2.5%	0	10	2.6%	2	8	1.6%	1	2	0.6%
0	1	0.8%	0	9	2.3%	2	9	2.2%	1	5	1.8%

TABLE 7.9-I

V A1 Count	Count	-%-	V A Total Count	Count	-%-	V C/A, C/B, B/A Count	Count	-%-	V Total Count	Count	-%-
0	0	--	0	0	--	0	0	--	75	6	8.0%
		--	0	0	--			--	1	1	1.3%
		--	0	0	--			--	0	1	1.3%
		--	0	0	--			--	0	3	4.0%
0	0	--	0	0	--	0	0	--	16	0	0.0%
		--	0	0	--			--	0	0	0.0%
		--	0	0	--			--	0	0	0.0%
		--	0	0	--			--	0	0	0.0%
50	4	8.0%	50	4	8.0%	122	9	7.4%	232	14	6.0%
0	0	0.0%	0	0	0.0%	0	1	0.8%	0	2	0.9%
0	1	2.0%	0	1	2.0%	0	3	2.5%	0	7	3.0%
0	1	2.0%	0	1	2.0%	0	1	0.8%	0	4	1.7%
0	0	--	0	0	--	0	0	--	93	13	14.0%
		--	0	0	--			--	0	0	0.0%
		--	0	0	--			--	0	3	3.2%
		--	0	0	--			--	0	1	1.1%
220	23	10.5%	220	23	10.5%	0	0	--	232	23	9.9%
9	0	0.0%	9	0	0.0%			--	9	0	0.0%
1	47	21.4%	1	47	21.4%			--	1	47	20.3%
0	0	0.0%	0	0	0.0%			--	0	0	0.0%
439	61	13.9%	768	97	12.6%	218	14	6.4%	1879	208	11.1%
9	0	0.0%	9	2	0.3%	0	1	0.5%	10	12	0.6%
1	50	11.4%	2	52	6.8%	1	7	3.2%	5	77	4.1%
0	5	1.1%	1	10	1.4%	1	2	1.4%	4	30	1.8%

TABLE 7.9-J

TABLE 7.10-A

Yahya IV C Phase/Context: 2 / Interior

Context:	Class:	screened Count	screened Weight	screened Index	not screened Count	not screened Weight	not screened Index	Exterior areas F & G not screened Count	Exterior areas F & G not screened Weight	Exterior areas F & G not screened Index
RUBBLE	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0
WALLS	total	0	0.0	0.0	0	0.0	0.0	6	28.0	4.7
	med.mammal			0.0			0.0	5	23.0	4.6
	lg.mammal			0.0			0.0	1	5.0	5.0
	other			0.0			0.0	0	0.0	0.0
OCCUPATION IN	total	49	49.5	1.0	204	1558.5	7.6	0	0.0	0.0
	med.mammal	42	40.5	1.0	176	930.0	5.3			0.0
	lg.mammal	6	8.5	1.4	26	627.0	24.1			0.0
	other	1	0.5	0.5	2	1.5	0.8			0.0
OCCUPATION OUT & ASSOCIATED	total	0	0.0	0.0	0	0.0	0.0	89	359.0	4.0
	med.mammal			0.0			0.0	68	219.0	3.2
	lg.mammal			0.0			0.0	20	135.5	6.8
	other			0.0			0.0	1	4.5	4.5
OCCUPATION & FILL IN	total	410	444.0	1.1	192	2366.0	12.3	0	0.0	0.0
	med.mammal	382	364.0	1.0	167	727.5	4.4			0.0
	lg.mammal	27	79.5	2.9	23	1633.5	71.0			0.0
	other	1	0.5	0.5	2	5.0	2.5			0.0
OCCUPATION & FILL OUT & ASSOCIATED	total	0	0.0	0.0	0	0.0	0.0	61	309.0	5.1
	med.mammal			0.0			0.0	54	218.5	4.0
	lg.mammal			0.0			0.0	4	60.5	15.1
	other			0.0			0.0	3	30.0	10.0

East Court and kitchen screened Count	Weight	Index	not screened Count	Weight	Index	2 / Total screened Count	Weight	Index	not screened Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	6	28.0	4.7
		0.0			0.0	0	0.0	0.0	5	23.0	4.6
		0.0			0.0	0	0.0	0.0	1	5.0	5.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
0	0.0	0.0	75	160.0	2.1	49	49.5	1.0	279	1718.5	6.2
		0.0	62	126.0	2.0	42	40.5	1.0	238	1056.0	4.4
		0.0	10	32.5	3.3	6	8.5	1.4	36	659.5	18.3
		0.0	3	1.5	0.5	1	0.5	0.5	5	3.0	0.6
325	453.0	1.4	158	1293.5	8.2	325	453.0	1.4	247	1652.5	6.7
311	407.5	1.3	146	974.5	6.7	311	407.5	1.3	214	1193.5	5.6
12	42.0	3.5	11	318.5	29.0	12	42.0	3.5	31	454.0	14.6
2	3.5	1.8	1	0.5	0.5	2	3.5	1.8	2	5.0	2.5
0	0.0	0.0	12	73.5	6.1	410	444.0	1.1	204	2439.5	12.0
		0.0	11	71.5	6.5	382	364.0	1.0	178	799.0	4.5
		0.0	1	2.0	2.0	27	79.5	2.9	24	1635.5	68.1
		0.0	0	0.0	0.0	1	0.5	0.5	2	5.0	2.5
1514	1975.0	1.3	213	2121.0	10.0	1514	1975.0	1.3	274	2430.0	8.9
1392	1663.5	1.2	186	1212.5	6.5	1392	1663.5	1.2	240	1431.0	6.0
70	280.5	4.0	26	908.0	34.9	70	280.5	4.0	30	968.5	32.3
52	31.0	0.6	1	0.5	0.5	52	31.0	0.6	4	30.5	7.6

TABLE 7.10-B

Total Count	Total Weight	Total Index	1 / Interior not screened Count	Weight	Index	Exterior Area G early not screened Count	Weight	Index	Exterior Area G late not screened Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
0	0.0	0.0			0.0			0.0			0.0
0	0.0	0.0			0.0			0.0			0.0
0	0.0	0.0			0.0			0.0			0.0
6	28.0	4.7	0	0.0	0.0	0	0.0	0.0	103	967.0	9.4
5	23.0	4.6			0.0			0.0	88	314.0	3.6
1	5.0	5.0			0.0			0.0	12	643.0	53.6
0	0.0	0.0			0.0			0.0	3	10.0	3.3
328	1768.0	5.4	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
280	1096.5	3.9			0.0			0.0			0.0
42	668.0	15.9			0.0			0.0			0.0
6	3.5	0.6			0.0			0.0			0.0
572	2105.5	3.7	0	0.0	0.0	61	312.5	5.1	0	0.0	0.0
525	1601.0	3.0			0.0	59	245.5	4.2			0.0
43	496.0	11.5			0.0	2	67.0	33.5			0.0
4	8.5	2.1			0.0	0	0.0	0.0			0.0
614	2883.5	4.7	135	884.0	6.5	0	0.0	0.0	0	0.0	0.0
560	1163.0	2.1	129	786.5	6.1			0.0			0.0
51	1715.0	33.6	6	97.5	16.3			0.0			0.0
3	5.5	1.8		0.0	0.0			0.0			0.0
1788	4405.0	2.5	0	0.0	0.0	73	351.5	4.8	246	1947.5	7.9
1632	3094.5	1.9			0.0	60	231.5	3.9	213	961.0	4.5
100	1249.0	12.5			0.0	12	119.5	10.0	32	983.0	30.7
56	61.5	1.1			0.0	1	0.5	0.5	1	3.5	3.5

TABLE 7.10-C

Upper East Side

screened			not screened			1 / Total not screened			Total		
Count	Weight	Index	Count	Weight	Index	Count	Weight	Index	Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
0	0.0	0.0	0	0.0	0.0	103	967.0	9.4	103	967.0	9.4
		0.0			0.0	88	314.0	3.6	88	314.0	3.6
		0.0			0.0	12	643.0	53.6	12	643.0	53.6
		0.0			0.0	3	10.0	3.3	3	10.0	3.3
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
0	0.0	0.0	0	0.0	0.0	61	312.5	5.1	61	312.5	5.1
		0.0			0.0	59	245.5	4.2	59	245.5	4.2
		0.0			0.0	2	67.0	33.5	2	67.0	33.5
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
0	0.0	0.0	0	0.0	0.0	135	884.0	6.5	135	884.0	6.5
		0.0			0.0	129	786.5	6.1	129	786.5	6.1
		0.0			0.0	6	97.5	16.3	6	97.5	16.3
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
0	0.0	0.0	0	0.0	0.0	319	2299.0	7.2	319	2299.0	7.2
		0.0			0.0	273	1192.5	4.4	273	1192.5	4.4
		0.0			0.0	44	1102.5	25.1	44	1102.5	25.1
		0.0			0.0	2	4.0	2.0	2	4.0	2.0

TABLE 7.10-D

2 - 1			IV C TOTAL								
not screened			screened			not screened			Total		
Count	Weight	Index	Count	Weight	Index	Count	Weight	Index	Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
0	0.0	0.0	0	0.0	0.0	109	995.0	9.1	109	995.0	9.1
		0.0	0	0.0	0.0	93	337.0	3.6	93	337.0	3.6
		0.0	0	0.0	0.0	13	648.0	49.8	13	648.0	49.8
		0.0	0	0.0	0.0	3	10.0	3.3	3	10.0	3.3
0	0.0	0.0	49	49.5	1.0	279	1718.5	6.2	328	1768.0	5.4
		0.0	42	40.5	1.0	238	1056.0	4.4	280	1096.5	3.9
		0.0	6	8.5	1.4	36	659.5	18.3	42	668.0	15.9
		0.0	1	0.5	0.5	5	3.0	0.6	6	3.5	0.6
0	0.0	0.0	325	453.0	1.4	308	1965.0	6.4	633	2418.0	3.8
		0.0	311	407.5	1.3	273	1439.0	5.3	584	1846.5	3.2
		0.0	12	42.0	3.5	33	521.0	15.8	45	563.0	12.5
		0.0	2	3.5	1.8	2	5.0	2.5	4	8.5	2.1
0	0.0	0.0	410	444.0	1.1	339	3323.5	9.8	749	3767.5	5.0
		0.0	382	364.0	1.0	307	1585.5	5.2	689	1949.5	2.8
		0.0	27	79.5	2.9	30	1733.0	57.8	57	1812.5	31.8
		0.0	1	0.5	0.5	2	5.0	2.5	3	5.5	1.8
0	0.0	0.0	1514	1975.0	1.3	593	4729.0	8.0	2107	6704.0	3.2
		0.0	1392	1663.5	1.2	513	2623.5	5.1	1905	4287.0	2.3
		0.0	70	280.5	4.0	74	2071.0	28.0	144	2351.5	16.3
		0.0	52	31.0	0.6	6	34.5	5.8	58	65.5	1.1

TABLE 7.10-E

TABLE 7.10-F

Yahya IV C	Phase/Context:	2 / Interior screened			not screened			Exterior areas F & G not screened		
Context:	Class:	Count	Weight	Index	Count	Weight	Index	Count	Weight	Index
MIDDEN	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0
ROOM FILL IN & ASSOCIATED	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0
UNDIFFER-ENTIATED FILL OUT	total	0	0.0	0.0	0	0.0	0.0	2	13.0	6.5
	med.mammal			0.0			0.0	2	13.0	6.5
	lg.mammal			0.0			0.0	0	0.0	0.0
	other			0.0			0.0	0	0.0	0.0
PLATFORM OR LEVELING	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0
MIXED OR OTHER	total	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	med.mammal			0.0			0.0			0.0
	lg.mammal			0.0			0.0			0.0
	other			0.0			0.0			0.0
TOTAL	total	459	493.5	1.1	396	3924.5	9.9	158	709.0	4.5
	med.mammal	424	404.5	1.0	343	1657.5	4.8	129	473.5	3.7
	lg.mammal	33	88.0	2.7	49	2260.5	46.1	25	201.0	8.0
	other	2	1.0	0.5	4	6.5	1.6	4	34.5	8.6

TABLE 7.10-G

East Court and kitchen screened Count	Weight	Index	not screened Count	Weight	Index	2 / Total screened Count	Weight	Index	not screened Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
0	0.0	0.0	20	381.5	19.1	0	0.0	0.0	20	381.5	19.1
		0.0	19	109.5	5.8	0	0.0	0.0	19	109.5	5.8
		0.0	1	272.0	272.0	0	0.0	0.0	1	272.0	272.0
		0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	2	13.0	6.5
		0.0			0.0	0	0.0	0.0	2	13.0	6.5
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
0	0.0	0.0	2	11.0	5.5	0	0.0	0.0	2	11.0	5.5
		0.0	2	11.0	5.5	0	0.0	0.0	2	11.0	5.5
		0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
1839	2428.0	1.3	480	4040.5	8.4	2298	2921.5	1.3	1034	8674.0	8.4
1703	2071.0	1.2	426	2505.0	5.9	2127	2475.5	1.2	898	4636.0	5.2
82	322.5	3.9	49	1533.0	31.3	115	410.5	3.6	123	3994.5	32.5
54	34.5	0.6	5	2.5	0.5	56	35.5	0.6	13	43.5	3.3

Total Count	Weight	Index	1 / Interior not screened Count	Weight	Index	Exterior Area G early not screened Count	Weight	Index	Exterior Area G late not screened Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
0	0.0	0.0			0.0			0.0			0.0
0	0.0	0.0			0.0			0.0			0.0
0	0.0	0.0			0.0			0.0			0.0
20	381.5	19.1	83	703.0	8.5	0	0.0	0.0	20	59.5	3.0
19	109.5	5.8	74	472.0	6.4			0.0	20	59.5	3.0
1	272.0	272.0	9	231.0	25.7			0.0	0	0.0	0.0
0	0.0	0.0	0	0.0	0.0			0.0	0	0.0	0.0
2	13.0	6.5	0	0.0	0.0	0	0.0	0.0	7	22.5	3.2
2	13.0	6.5			0.0			0.0	7	22.5	3.2
0	0.0	0.0			0.0			0.0	0	0.0	0.0
0	0.0	0.0			0.0			0.0	0	0.0	0.0
0	0.0	0.0	39	277.0	7.1	0	0.0	0.0	0	0.0	0.0
0	0.0	0.0	33	248.5	7.5			0.0			0.0
0	0.0	0.0	5	25.5	5.1			0.0			0.0
0	0.0	0.0	1	3.0	3.0			0.0			0.0
2	11.0	5.5	0	0.0	0.0	0	0.0	0.0	52	287.5	5.5
2	11.0	5.5			0.0			0.0	48	161.5	3.4
0	0.0	0.0			0.0			0.0	4	126.0	31.5
0	0.0	0.0			0.0			0.0	0	0.0	0.0
3332	11595.5	3.5	257	1864.0	7.3	134	664.0	5.0	428	3284.0	7.7
3025	7111.5	2.4	236	1507.0	6.4	119	477.0	4.0	376	1518.5	4.0
238	4405.0	18.5	20	354.0	17.7	14	186.5	13.3	48	1752.0	36.5
69	79.0	1.1	1	3.0	3.0	1	0.5	0.5	4	13.5	3.4

TABLE 7.10-H

TABLE 7.10-I

Upper East Side screened Count	Weight	Index	not screened Count	Weight	Index	1 / Total not screened Count	Weight	Index	Total Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
612	1072.0	1.8	189	785.5	4.2	292	1548.0	5.3	904	2620.0	2.9
577	907.0	1.6	176	527.0	3.0	270	1058.5	3.9	847	1965.5	2.3
27	118.0	4.4	11	247.0	22.5	20	478.0	23.9	47	596.0	12.7
8	47.0	5.9	2	11.5	5.8	2	11.5	5.8	10	58.5	5.9
0	0.0	0.0	0	0.0	0.0	7	22.5	3.2	7	22.5	3.2
		0.0			0.0	7	22.5	3.2	7	22.5	3.2
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
0	0.0	0.0	0	0.0	0.0	39	277.0	7.1	39	277.0	7.1
		0.0			0.0	33	248.5	7.5	33	248.5	7.5
		0.0			0.0	5	25.5	5.1	5	25.5	5.1
		0.0			0.0	1	3.0	3.0	1	3.0	3.0
0	0.0	0.0	0	0.0	0.0	52	287.5	5.5	52	287.5	5.5
		0.0			0.0	48	161.5	3.4	48	161.5	3.4
		0.0			0.0	4	126.0	31.5	4	126.0	31.5
		0.0			0.0	0	0.0	0.0	0	0.0	0.0
612	1072.0	1.8	189	785.5	4.2	1008	6597.5	6.5	1620	7669.5	4.7
577	907.0	1.6	176	527.0	3.0	907	4029.5	4.4	1484	4936.5	3.3
27	118.0	4.4	11	247.0	22.5	93	2539.5	27.3	120	2657.5	22.1
8	47.0	5.9	2	11.5	5.8	8	28.5	3.6	16	75.5	4.7

2 - 1			IV C TOTAL								
not screened			screened			not screened			Total		
Count	Weight	Index	Count	Weight	Index	Count	Weight	Index	Count	Weight	Index
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
42	318.0	7.6	612	1072.0	1.8	354	2247.5	6.3	966	3319.5	3.4
42	318.0	7.6	577	907.0	1.6	331	1486.0	4.5	908	2393.0	2.6
0	0.0	0.0	27	118.0	4.4	21	750.0	35.7	48	868.0	18.1
0	0.0	0.0	8	47.0	5.9	2	11.5	5.8	10	58.5	5.9
0	0.0	0.0	0	0.0	0.0	9	35.5	3.9	9	35.5	3.9
		0.0	0	0.0	0.0	9	35.5	3.9	9	35.5	3.9
		0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
		0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
0	0.0	0.0	0	0.0	0.0	39	277.0	7.1	39	277.0	7.1
		0.0	0	0.0	0.0	33	248.5	7.5	33	248.5	7.5
		0.0	0	0.0	0.0	5	25.5	5.1	5	25.5	5.1
		0.0	0	0.0	0.0	1	3.0	3.0	1	3.0	3.0
0	0.0	0.0	0	0.0	0.0	54	298.5	5.5	54	298.5	5.5
		0.0	0	0.0	0.0	50	172.5	3.5	50	172.5	3.5
		0.0	0	0.0	0.0	4	126.0	31.5	4	126.0	31.5
		0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
42	318.0	7.6	2910	3993.5	1.4	2084	15589.5	7.5	4994	19583.0	3.9
42	318.0	7.6	2704	3382.5	1.3	1847	8983.5	4.9	4551	12366.0	2.7
0	0.0	0.0	142	528.5	3.7	216	6534.0	30.3	358	7062.5	19.7
0	0.0	0.0	64	82.5	1.3	21	72.0	3.4	85	154.5	1.8

TABLE 7.10-J

Yahya IV C	Phase/Context:	2 / Interior screened Count	Count	--%--	not screened Count	Count	--%--	Exterior areas F & G not screened Count	Count	--%--
Context:										
RUBBLE	O-O&C-%O/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	O/C-oth-%oth			--			--			--
	Av/Rp-Tot-%O		0	--		0	--		0	--
WALLS	O-O&C-%O/C	0	0	--	0	0	--	0	1	100.0%
	C-Bos-%Bos			--			--	0	0	0.0%
	O/C-oth-%oth			--			--	1	0	0.0%
	Av/Rp-Tot-%O		0	--		0	--	0	1	--
OCCUPATION IN	O-O&C-%O/C	2	5	100.0%	9	52	88.1%	0	0	--
	C-Bos-%Bos	0	0	0.0%	28	7	11.9%			--
	O/C-oth-%oth	3	0	0.0%	15	0	0.0%			--
	Av/Rp-Tot-%O	0	5	100.0%	2	59	24.3%		0	--
OCCUPATION OUT & ASSOCIATED	O-O&C-%O/C	0	0	--	0	0	--	2	18	90.0%
	C-Bos-%Bos			--			--	7	2	10.0%
	O/C-oth-%oth			--			--	9	0	0.0%
	Av/Rp-Tot-%O		0	--		0	--	0	20	22.2%
OCCUPATION & FILL IN	O-O&C-%O/C	6	37	94.9%	6	43	82.7%	0	0	--
	C-Bos-%Bos	14	1	2.6%	16	9	17.3%			--
	O/C-oth-%oth	17	1	2.6%	21	0	0.0%			--
	Av/Rp-Tot-%O	5	39	30.0%	0	52	27.3%		0	--
OCCUPATION & FILL OUT & ASSOCIATED	O-O&C-%O/C	0	0	--	0	0	--	2	9	75.0%
	C-Bos-%Bos			--			--	3	1	8.3%
	O/C-oth-%oth			--			--	4	2	16.7%
	Av/Rp-Tot-%O		0	--		0	--	0	12	40.0%

TABLE 7.11-A

TABLE 7.11-B

East Court and kitchen screened Count	Count	--%--	not screened Count	Count	--%--	2 / Total screened Count	Count	--%--	not screened Count	Count	--%--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
	0	--		0	--	0	0	--	0	0	--
0	0	--	0	0	--	0	0	--	0	1	100.0%
		--			--	0	0	--	0	0	0.0%
		--			--	0	0	--	1	0	0.0%
	0	--		0	--	0	0	--	0	1	--
0	0	--	1	14	100.0%	2	5	100.0%	10	66	90.4%
		--	9	0	0.0%	0	0	0.0%	37	7	9.6%
		--	4	0	0.0%	3	0	0.0%	19	0	0.0%
	0	--	0	14	10.0%	0	5	100.0%	2	73	21.3%
8	45	90.0%	9	58	98.3%	8	45	90.0%	11	76	96.2%
14	2	4.0%	26	0	0.0%	14	2	4.0%	33	2	2.5%
23	3	6.0%	23	1	1.7%	23	3	6.0%	32	1	1.3%
0	50	36.4%	1	59	25.7%	0	50	36.4%	1	79	25.0%
0	0	--	0	3	100.0%	6	37	94.9%	6	46	83.6%
		--	2	0	0.0%	14	1	2.6%	18	9	16.4%
		--	1	0	0.0%	17	1	2.6%	22	0	0.0%
	0	--	0	3	0.0%	5	39	30.0%	0	55	25.0%
15	166	91.7%	23	69	87.3%	15	166	91.7%	25	78	85.7%
39	2	1.1%	18	7	8.9%	39	2	1.1%	21	8	8.8%
112	13	7.2%	28	3	3.8%	112	13	7.2%	32	5	5.5%
7	181	27.8%	1	79	56.1%	7	181	27.8%	1	91	54.3%

Total Count	Count	--%--	1 / Interior not screened Count	Count	--%--	Exterior Area G early not screened Count	Count	--%--	Exterior Area G late not screened Count	Count	--%--
0	0	--	0	0	--	0	0	--	0	0	--
0	0	--			--			--			--
0	0	--			--			--			--
0	0	--		0	--		0	--		0	--
0	1	100.0%	0	0	--	0	0	--	2	23	82.1%
0	0	0.0%			--			--	13	5	17.9%
1	0	0.0%			--			--	8	0	0.0%
0	1	--		0	--		0	--	0	28	13.3%
12	71	91.0%	0	0	--	0	0	--	0	0	--
37	7	9.0%			--			--			--
22	0	0.0%			--			--			--
2	78	24.5%		0	--		0	--		0	--
19	121	93.8%	0	0	--	1	23	92.0%	0	0	--
47	4	3.1%			--	10	2	8.0%			--
55	4	3.1%			--	12	0	0.0%			--
1	129	28.8%		0	--	1	25	9.1%		0	--
12	83	88.3%	6	56	94.9%	0	0	--	0	0	--
32	10	10.6%	29	1	1.7%			--			--
39	1	1.1%	21	2	3.4%			--			--
5	94	27.3%	0	59	17.1%		0	--		0	--
40	244	89.7%	0	0	--	2	22	84.6%	14	83	87.4%
60	10	3.7%			--	8	2	7.7%	31	10	10.5%
144	18	6.6%			--	12	2	7.7%	38	2	2.1%
8	272	40.0%		0	--	0	26	20.0%	3	95	31.1%

TABLE 7.11-C

Upper East Side						1 / Total					
screened			not screened			not screened			Total		
Count	Count	--%--	Count	Count	--%--	Count	Count	--%--	Count	Count	--%--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
	0	--		0	--	0	0	--	0	0	--
0	0	--	0	0	--	2	23	82.1%	2	23	82.1%
		--			--	13	5	17.9%	13	5	17.9%
		--			--	8	0	0.0%	8	0	0.0%
	0	--		0	--	0	28	13.3%	0	28	13.3%
0	0	--	0	0	--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		-			--	0	0	--	0	0	--
	0	--		0	--	0	0	--	0	0	--
0	0	--	0	0	--	1	23	92.0%	1	23	92.0%
		--			--	10	2	8.0%	10	2	8.0%
		--			--	12	0	0.0%	12	0	0.0%
	0	--		0	--	1	25	9.1%	1	25	9.1%
0	0	--	0	0	--	6	56	94.9%	6	56	94.9%
		--			--	29	1	1.7%	29	1	1.7%
		--			--	21	2	3.4%	21	2	3.4%
	0	--		0	--	0	59	17.1%	0	59	17.1%
0	0	--	0	0	--	16	105	86.8%	16	105	86.8%
		--			--	39	12	9.9%	39	12	9.9%
		--			--	50	4	3.3%	50	4	3.3%
	0	--		0	--	3	121	29.1%	3	121	29.1%

TABLE 7.11-D

2 - 1 not screened Count	Count	--%--	IV C TOTAL screened Count	Count	--%--	not screened Count	Count	--%--	Total Count	Count	--%--
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--	0	0	--	0	0	--
		--	0	0	--	0	0	--	0	0	--
	0	--	0	0	--	0	0	--	0	0	--
0	0	--	0	0	--	2	24	82.8%	2	24	82.8%
		--	0	0	--	13	5	17.2%	13	5	17.2%
		--	0	0	--	9	0	0.0%	9	0	0.0%
	0	--	0	0	--	0	29	13.3%	0	29	13.3%
0	0	--	2	5	100.0%	10	66	90.4%	12	71	91.0%
		--	0	0	0.0%	37	7	9.6%	37	7	9.0%
		--	3	0	0.0%	19	0	0.0%	22	0	0.0%
	0	--	0	5	100.0%	2	73	21.3%	2	78	24.5%
0	0	--	8	45	90.0%	12	99	95.2%	20	144	93.5%
		--	14	2	4.0%	43	4	3.8%	57	6	3.9%
		--	23	3	6.0%	44	1	1.0%	67	4	2.6%
	0	--	0	50	36.4%	2	104	21.8%	2	154	26.0%
0	0	--	6	37	94.9%	12	102	89.5%	18	139	90.8%
		--	14	1	2.6%	47	10	8.8%	61	11	7.2%
		--	17	1	2.6%	43	2	1.8%	60	3	2.0%
	0	--	5	39	30.0%	0	114	20.3%	5	153	22.8%
0	0	--	15	166	91.7%	41	183	86.3%	56	349	88.8%
		--	39	2	1.1%	60	20	9.4%	99	22	5.6%
		--	112	13	7.2%	82	9	4.2%	194	22	5.6%
	0	--	7	181	27.8%	4	212	40.6%	11	393	36.1%

TABLE 7.11-E

Yahya IV C Phase/Context: 2 / Interior

Context:		screened Count	Count	--%--	not screened Count	Count	--%--	Exterior areas F & G not screened Count	Count	--%--
MIDDEN	O-O&C-%O/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	O/C-oth-%oth			--			--			--
	Av/Rp-Tot-%O		0	--		0	--		0	--
ROOM FILL IN & ASSOCIATED	O-O&C-%O/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	O/C-oth-%oth			--			--			--
	Av/Rp-Tot-%O		0	--		0	--		0	--
UNDIFFER-ENTIATED FILL OUT	O-O&C-%O/C	0	0	--	0	0	--	1	1	100.0%
	C-Bos-%Bos			--			--	0	0	0.0%
	O/C-oth-%oth			--			--	0	0	0.0%
	Av/Rp-Tot-%O		0	--		0	--	0	1	100.0%
PLATFORM OR LEVELING	O-O&C-%O/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	O/C-oth-%oth			--			--			--
	Av/Rp-Tot-%O		0	--		0	--		0	--
MIXED OR OTHER	O-O&C-%O/C	0	0	--	0	0	--	0	0	--
	C-Bos-%Bos			--			--			--
	O/C-oth-%oth			--			--			--
	Av/Rp-Tot-%O		0	--		0	--		0	--
TOTAL	O-O&C-%O/C	8	42	95.5%	15	95	85.6%	5	29	85.3%
	C-Bos-%Bos	14	1	2.3%	44	16	14.4%	10	3	8.8%
	O/C-oth-%oth	20	1	2.3%	36	0	0.0%	14	2	5.9%
	Av/Rp-Tot-%O	5	44	36.4%	2	111	25.4%	0	34	33.3%

TABLE 7.11-F

TABLE 7.11-G

East Court and kitchen						2 / Total					
screened			not screened			screened			not screened		
Count	Count	--%--	Count	Count	--%--	Count	Count	--%--	Count	Count	--%--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
	0	--		0	--	0	0	--	0	0	--
0	0	--	3	9	90.0%	0	0	--	3	9	90.0%
		--	2	1	10.0%	0	0	--	2	1	10.0%
		--	4	0	0.0%	0	0	--	4	0	0.0%
	0	--	0	10	60.0%	0	0	--	0	10	60.0%
0	0	--	0	0	--	0	0	--	1	1	100.0%
		--			--	0	0	--	0	0	0.0%
		--			--	0	0	--	0	0	0.0%
	0	--		0	--	0	0	--	0	1	100.0%
0	0	--	0	0	--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
	0	--		0	--	0	0	--	0	0	--
0	0	--	0	1	100.0%	0	0	--	0	1	100.0%
		--	1	0	0.0%	0	0	--	1	0	0.0%
		--	0	0	0.0%	0	0	--	0	0	0.0%
	0	--	0	1	0.0%	0	0	--	0	1	0.0%
23	211	91.3%	36	154	92.8%	31	253	92.0%	56	278	89.4%
53	4	1.7%	58	8	4.8%	67	5	1.8%	112	27	8.7%
135	16	6.9%	60	4	2.4%	155	17	6.2%	110	6	1.9%
7	231	30.3%	2	166	38.3%	12	275	31.6%	4	311	33.3%

Total Count	Count	--%--	1 / Interior not screened Count	Count	--%--	Exterior Area G early not screened Count	Count	--%--	Exterior Area G late not screened Count	Count	--%--
0	0	--	0	0	--	0	0	--	0	0	--
0	0	--			--			--			--
0	0	--			--			--			--
0	0	--		0	--		0	--		0	--
3	9	90.0%	7	38	92.7%	0	0	--	2	9	100.0%
2	1	10.0%	17	3	7.3%			--	1	0	0.0%
4	0	0.0%	14	0	0.0%			--	6	0	0.0%
0	10	60.0%	5	41	29.2%		0	--	0	9	66.7%
1	1	100.0%	0	0	--	0	0	--	0	2	100.0%
0	0	0.0%			--			--	0	0	0.0%
0	0	0.0%			--			--	2	0	0.0%
0	1	100.0%		0	--		0	--	0	2	--
0	0	--	2	17	94.4%	0	0	--	0	0	--
0	0	--	9	0	0.0%			--			--
0	0	--	6	1	5.6%			--			--
0	0	--	0	18	18.2%		0	--		0	--
0	1	100.0%	0	0	--	0	0	--	1	9	81.8%
1	0	0.0%			--			--	5	2	18.2%
0	0	0.0%			--			--	3	0	0.0%
0	1	0.0%		0	--		0	--	0	11	16.7%
87	531	90.6%	15	111	94.1%	3	45	88.2%	19	126	86.9%
179	32	5.5%	55	4	3.4%	18	4	7.8%	50	17	11.7%
265	23	3.9%	41	3	2.5%	24	2	3.9%	57	2	1.4%
16	586	32.7%	5	118	21.4%	1	51	14.3%	3	145	27.5%

TABLE 7.11-H

Upper East Side screened Count	Count	--%--	not screened Count	Count	--%--	1 / Total not screened Count	Count	--%--	Total Count	Count	--%--
0	0	--	0	0	--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
	0	--		0	--	0	0	--	0	0	--
4	85	98.8%	1	38	90.5%	10	85	92.4%	14	170	95.5%
19	0	0.0%	16	4	9.5%	34	7	7.6%	53	7	3.9%
62	1	1.2%	21	0	0.0%	41	0	0.0%	103	1	0.6%
6	86	17.4%	1	42	5.9%	6	92	22.7%	12	178	20.9%
0	0	--	0	0	--	0	2	100.0%	0	2	100.0%
		--			--	0	0	0.0%	0	0	0.0%
		--			--	2	0	0.0%	2	0	0.0%
	0	--		0	--	0	2	--	0	2	--
0	0	--	0	0	--	2	17	94.4%	2	17	94.4%
		--			--	9	0	0.0%	9	0	0.0%
		--			--	6	1	5.6%	6	1	5.6%
	0	--		0	--	0	18	18.2%	0	18	18.2%
0	0	--	0	0	--	1	9	81.8%	1	9	81.8%
		--			--	5	2	18.2%	5	2	18.2%
		--			--	3	0	0.0%	3	0	0.0%
	0	--		0	--	0	11	16.7%	0	11	16.7%
4	85	98.8%	1	38	90.5%	38	320	89.9%	42	405	91.6%
19	0	0.0%	16	4	9.5%	139	29	8.1%	158	29	6.6%
62	1	1.2%	21	0	0.0%	143	7	2.0%	205	8	1.8%
6	86	17.4%	1	42	5.9%	10	356	21.5%	16	442	21.0%

TABLE 7.11-I

2 - 1			IV C TOTAL								
not screened			screened			not screened			Total		
Count	Count	--%--	Count	Count	--%--	Count	Count	--%--	Count	Count	--%--
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--	0	0	--	0	0	--
		--	0	0	--	0	0	--	0	0	--
	0	--	0	0	--	0	0	--	0	0	--
1	14	93.3%	4	85	98.8%	14	108	92.3%	18	193	95.1%
9	0	0.0%	19	0	0.0%	45	8	6.8%	64	8	3.9%
4	1	6.7%	62	1	1.2%	49	1	0.9%	111	2	1.0%
1	15	10.0%	6	86	17.4%	7	117	23.7%	13	203	22.0%
0	0	--	0	0	--	1	3	100.0%	1	3	100.0%
		--	0	0	--	0	0	0.0%	0	0	0.0%
		--	0	0	--	2	0	0.0%	2	0	0.0%
	0	--	0	0	--	0	3	100.0%	0	3	100.0%
0	0	--	0	0	--	2	17	94.4%	2	17	94.4%
		--	0	0	--	9	0	0.0%	9	0	0.0%
		--	0	0	--	6	1	5.6%	6	1	5.6%
	0	--	0	0	--	0	18	18.2%	0	18	18.2%
0	0	--	0	0	--	1	10	83.3%	1	10	83.3%
		--	0	0	--	6	2	16.7%	6	2	16.7%
		--	0	0	--	3	0	0.0%	3	0	0.0%
	0	--	0	0	--	0	12	14.3%	0	12	14.3%
1	14	93.3%	35	338	93.6%	95	612	89.7%	130	950	91.1%
9	0	0.0%	86	5	1.4%	260	56	8.2%	346	61	5.8%
4	1	6.7%	217	18	5.0%	257	14	2.1%	474	32	3.1%
1	15	10.0%	18	361	28.9%	15	682	26.8%	33	1043	27.3%

TABLE 7.11-J

Yahya IV C   Phase/Context: 2 / Interior

Context:		screened Count	Count	-%-	not screened Count	Count	-%-	Exterior areas F & G not screened Count	Count	-%-
RUBBLE	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--
WALLS	tot-rodent-%r	0	0	--	0	0	--	6	0	0.0%
	pol-carniv-%c			--			--	0	1	16.7%
	tool-burn-%b			--			--	1	0	0.0%
	blow-cut-%b&c			--			--	0	0	0.0%
OCCUPATION IN	tot-rodent-%r	49	2	4.1%	204	25	12.3%	0	0	--
	pol-carniv-%c	0	0	0.0%	0	1	0.5%			--
	tool-burn-%b	0	0	0.0%	1	0	0.0%			--
	blow-cut-%b&c	0	1	2.0%	0	16	7.8%			--
OCCUPATION OUT & ASSOCIATED	tot-rodent-%r	0	0	--	0	0	--	89	15	16.9%
	pol-carniv-%c			--			--	0	0	0.0%
	tool-burn-%b			--			--	0	0	0.0%
	blow-cut-%b&c			--			--	0	0	0.0%
OCCUPATION & FILL IN	tot-rodent-%r	410	30	7.3%	192	23	12.0%	0	0	--
	pol-carniv-%c	0	0	0.0%	0	6	3.1%			--
	tool-burn-%b	0	3	0.7%	0	1	0.5%			--
	blow-cut-%b&c	0	4	1.0%	0	12	6.3%			--
OCCUPATION & FILL OUT & ASSOCIATED	tot-rodent-%r	0	0	--	0	0	--	61	5	8.2%
	pol-carniv-%c			--			--	0	0	0.0%
	tool-burn-%b			--			--	0	0	0.0%
	blow-cut-%b&c			--			--	0	3	4.9%

TABLE 7.12-A

East Court and kitchen						2 / Total					
screened			not screened			screened			not screened		
Count	Count	-%-	Count	Count	-%-	Count	Count	-%-	Count	Count	-%-
0	0	--	0	0	--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
0	0	--	0	0	--	0	0	--	6	0	0.0%
		--			--	0	0	--	0	1	16.7%
		--			--	0	0	--	1	0	0.0%
		--			--	0	0	--	0	0	0.0%
0	0	--	75	2	2.7%	49	2	4.1%	279	27	9.7%
		--	0	0	0.0%	0	0	0.0%	0	1	0.4%
		--	0	1	1.3%	0	0	0.0%	1	1	0.4%
		--	0	1	1.3%	0	1	2.0%	0	17	6.1%
325	22	6.8%	158	36	22.8%	325	22	6.8%	247	51	20.6%
1	1	0.3%	0	5	3.2%	1	1	0.3%	0	5	2.0%
0	3	0.9%	1	1	0.6%	0	3	0.9%	1	1	0.4%
0	7	2.2%	0	10	6.3%	0	7	2.2%	0	10	4.0%
0	0	--	12	2	16.7%	410	30	7.3%	204	25	12.3%
		--	0	0	0.0%	0	0	0.0%	0	6	2.9%
		--	0	0	0.0%	0	3	0.7%	0	1	0.5%
		--	0	1	8.3%	0	4	1.0%	0	13	6.4%
1514	62	4.1%	213	43	20.2%	1514	62	4.1%	274	48	17.5%
0	1	0.1%	1	0	0.0%	0	1	0.1%	1	0	0.0%
2	102	6.7%	0	2	0.9%	2	102	6.7%	0	2	0.7%
0	14	0.9%	0	16	7.5%	0	14	0.9%	0	19	6.9%

TABLE 7.12-B

Total Count	Count	-%-	1 / Interior not screened Count	Count	-%-	Exterior Area G early not screened Count	Count	-%-	Exterior Area G late not screened Count	Count	-%-
0	0	--	0	0	--	0	0	--	0	0	--
0	0	--			--			--			--
0	0	--			--			--			--
0	0	--			--			--			--
6	0	0.0%	0	0	--	0	0	--	103	17	16.5%
0	1	16.7%			--			--	1	2	1.9%
1	0	0.0%			--			--	0	0	0.0%
0	0	0.0%			--			--	0	5	4.9%
328	29	8.8%	0	0	--	0	0	--	0	0	--
0	1	0.3%			--			--			--
1	1	0.3%			--			--			--
0	18	5.5%			--			--			--
572	73	12.8%	0	0	--	61	8	13.1%	0	0	--
1	6	1.0%			--	0	0	0.0%			--
1	4	0.7%			--	0	0	0.0%			--
0	17	3.0%			--	0	3	4.9%			--
614	55	9.0%	135	22	16.3%	0	0	--	0	0	--
0	6	1.0%	0	0	0.0%			--			--
0	4	0.7%	0	0	0.0%			--			--
0	17	2.8%	0	9	6.7%			--			--
1788	110	6.2%	0	0	--	73	8	11.0%	246	24	9.8%
1	1	0.1%			--	0	1	1.4%	0	4	1.6%
2	104	5.8%			--	0	1	1.4%	0	6	2.4%
0	33	1.8%			--	0	3	4.1%	0	8	3.3%

TABLE 7.12-C

Upper East Side screened Count	Count	-%-	not screened Count	Count	-%-	1 / Total not screened Count	Count	-%-	Total Count	Count	-%-
0	0	--	0	0	--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
0	0	--	0	0	--	103	17	16.5%	103	17	16.5%
		--			--	1	2	1.9%	1	2	1.9%
		--			--	0	0	0.0%	0	0	0.0%
		--			--	0	5	4.9%	0	5	4.9%
0	0	--	0	0	--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
0	0	--	0	0	--	61	8	13.1%	61	8	13.1%
		--			--	0	0	0.0%	0	0	0.0%
		--			--	0	0	0.0%	0	0	0.0%
		--			--	0	3	4.9%	0	3	4.9%
0	0	--	0	0	--	135	22	16.3%	135	22	16.3%
		--			--	0	0	0.0%	0	0	0.0%
		--			--	0	0	0.0%	0	0	0.0%
		--			--	0	9	6.7%	0	9	6.7%
0	0	--	0	0	--	319	32	10.0%	319	32	10.0%
		--			--	0	5	1.6%	0	5	1.6%
		--			--	0	7	2.2%	0	7	2.2%
		--			--	0	11	3.4%	0	11	3.4%

TABLE 7.12-D

2 - 1 not screened Count	Count	-%-	IV C TOTAL screened Count	Count	-%-	not screened Count	Count	-%-	Total Count	Count	-%-
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--	0	0	--	0	0	--
		--	0	0	--	0	0	--	0	0	--
		--	0	0	--	0	0	--	0	0	--
0	0	--	0	0	--	109	17	15.6%	109	17	15.6%
		--	0	0	--	1	3	2.8%	1	3	2.8%
		--	0	0	--	1	0	0.0%	1	0	0.0%
		--	0	0	--	0	5	4.6%	0	5	4.6%
0	0	--	49	2	4.1%	279	27	9.7%	328	29	8.8%
		--	0	0	0.0%	0	1	0.4%	0	1	0.3%
		--	0	0	0.0%	1	1	0.4%	1	1	0.3%
		--	0	1	2.0%	0	17	6.1%	0	18	5.5%
0	0	--	325	22	6.8%	308	59	19.2%	633	81	12.8%
		--	1	1	0.3%	0	5	1.6%	1	6	0.9%
		--	0	3	0.9%	1	1	0.3%	1	4	0.6%
		--	0	7	2.2%	0	13	4.2%	0	20	3.2%
0	0	--	410	30	7.3%	339	47	13.9%	749	77	10.3%
		--	0	0	0.0%	0	6	1.8%	0	6	0.8%
		--	0	3	0.7%	0	1	0.3%	0	4	0.5%
		--	0	4	1.0%	0	22	6.5%	0	26	3.5%
0	0	--	1514	62	4.1%	593	80	13.5%	2107	142	6.7%
		--	0	1	0.1%	1	5	0.8%	1	6	0.3%
		--	2	102	6.7%	0	9	1.5%	2	111	5.3%
		--	0	14	0.9%	0	30	5.1%	0	44	2.1%

TABLE 7.12-E

TABLE 7.12-F

Yahya IV C	Phase/Context:	2 / Interior screened			not screened			Exterior areas F & G not screened		
Context:		Count	Count	-%-	Count	Count	-%-	Count	Count	-%-
MIDDEN	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--
ROOM FILL IN & ASSOCIATED	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--
UNDIFFER-ENTIATED FILL OUT	tot-rodent-%r	0	0	--	0	0	--	2	0	0.0%
	pol-carniv-%c			--			--	0	0	0.0%
	tool-burn-%b			--			--	0	0	0.0%
	blow-cut-%b&c			--			--	0	0	0.0%
PLATFORM OR LEVELING	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--
MIXED OR OTHER	tot-rodent-%r	0	0	--	0	0	--	0	0	--
	pol-carniv-%c			--			--			--
	tool-burn-%b			--			--			--
	blow-cut-%b&c			--			--			--
TOTAL	tot-rodent-%r	459	32	7.0%	396	48	12.1%	158	20	12.7%
	pol-carniv-%c	0	0	0.0%	0	7	1.8%	0	1	0.6%
	tool-burn-%b	0	3	0.7%	1	1	0.3%	1	0	0.0%
	blow-cut-%b&c	0	5	1.1%	0	28	7.1%	0	3	1.9%

East Court and kitchen						2 / Total					
screened			not screened			screened			not screened		
Count	Count	-%-	Count	Count	-%-	Count	Count	-%-	Count	Count	-%-
0	0	--	0	0	--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
0	0	--	20	2	10.0%	0	0	--	20	2	10.0%
		--	0	0	0.0%	0	0	--	0	0	0.0%
		--	0	1	5.0%	0	0	--	0	1	5.0%
		--	0	1	5.0%	0	0	--	0	1	5.0%
0	0	--	0	0	--	0	0	--	2	0	0.0%
		--			--	0	0	--	0	0	0.0%
		--			--	0	0	--	0	0	0.0%
		--			--	0	0	--	0	0	0.0%
0	0	--	0	0	--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
0	0	--	2	0	0.0%	0	0	--	2	0	0.0%
		--	0	2	100.0%	0	0	--	0	2	100.0%
		--	0	0	0.0%	0	0	--	0	0	0.0%
		--	0	1	50.0%	0	0	--	0	1	50.0%
1839	84	4.6%	480	85	17.7%	2298	116	5.0%	1034	153	14.8%
1	2	0.1%	1	7	1.5%	1	2	0.1%	1	15	1.5%
2	105	5.7%	1	5	1.0%	2	108	4.7%	3	6	0.6%
0	21	1.1%	0	30	6.3%	0	26	1.1%	0	61	5.9%

TABLE 7.12-G

Total Count	Count	-%-	1 / Interior not screened Count	Count	-%-	Exterior Area G early not screened Count	Count	-%-	Exterior Area G late not screened Count	Count	-%-
0	0	--	0	0	--	0	0	--	0	0	--
0	0	--			--			--			--
0	0	--			--			--			--
0	0	--			--			--			--
20	2	10.0%	83	21	25.3%	0	0	--	20	2	10.0%
0	0	0.0%	0	4	4.8%			--	0	0	0.0%
0	1	5.0%	0	0	0.0%			--	0	0	0.0%
0	1	5.0%	0	12	14.5%			--	0	0	0.0%
2	0	0.0%	0	0	--	0	0	--	7	1	14.3%
0	0	0.0%			--			--	0	1	14.3%
0	0	0.0%			--			--	0	0	0.0%
0	0	0.0%			--			--	0	0	0.0%
0	0	--	39	8	20.5%	0	0	--	0	0	--
0	0	--	0	1	2.6%			--			--
0	0	--	0	0	0.0%			--			--
0	0	--	0	1	2.6%			--			--
2	0	0.0%	0	0	--	0	0	--	52	4	7.7%
0	2	100.0%			--			--	0	1	1.9%
0	0	0.0%			--			--	0	0	0.0%
0	1	50.0%			--			--	0	4	7.7%
3332	269	8.1%	257	51	19.8%	134	16	11.9%	428	48	11.2%
2	17	0.5%	0	5	1.9%	0	1	0.7%	1	8	1.9%
5	114	3.4%	0	0	0.0%	0	1	0.7%	0	6	1.4%
0	87	2.6%	0	22	8.6%	0	6	4.5%	0	17	4.0%

TABLE 7.12-H

Upper East Side screened Count	Count	-%-	not screened Count	Count	-%-	1 / Total not screened Count	Count	-%-	Total Count	Count	-%-
0	0	--	0	0	--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
		--			--	0	0	--	0	0	--
612	24	3.9%	189	12	6.3%	292	35	12.0%	904	59	6.5%
0	1	0.2%	0	1	0.5%	0	5	1.7%	0	6	0.7%
1	2	0.3%	0	1	0.5%	0	1	0.3%	1	3	0.3%
0	6	1.0%	0	4	2.1%	0	16	5.5%	0	22	2.4%
0	0	--	0	0	--	7	1	14.3%	7	1	14.3%
		--			--	0	1	14.3%	0	1	14.3%
		--			--	0	0	0.0%	0	0	0.0%
		--			--	0	0	0.0%	0	0	0.0%
0	0	--	0	0	--	39	8	20.5%	39	8	20.5%
		--			--	0	1	2.6%	0	1	2.6%
		--			--	0	0	0.0%	0	0	0.0%
		--			--	0	1	2.6%	0	1	2.6%
0	0	--	0	0	--	52	4	7.7%	52	4	7.7%
		--			--	0	1	1.9%	0	1	1.9%
		--			--	0	0	0.0%	0	0	0.0%
		--			--	0	4	7.7%	0	4	7.7%
612	24	3.9%	189	12	6.3%	1008	127	12.6%	1620	151	9.3%
0	1	0.2%	0	1	0.5%	1	15	1.5%	1	16	1.0%
1	2	0.3%	0	1	0.5%	0	8	0.8%	1	10	0.6%
0	6	1.0%	0	4	2.1%	0	49	4.9%	0	55	3.4%

TABLE 7.12-I

2 - 1			IV C TOTAL								
not screened			screened			not screened			Total		
Count	Count	-%-	Count	Count	-%-	Count	Count	-%-	Count	Count	-%-
0	0	--	0	0	--	0	0	--	0	0	--
		--	0	0	--	0	0	--	0	0	--
		--	0	0	--	0	0	--	0	0	--
		--	0	0	--	0	0	--	0	0	--
42	10	23.8%	612	24	3.9%	354	47	13.3%	966	71	7.3%
0	0	0.0%	0	1	0.2%	0	5	1.4%	0	6	0.6%
0	2	4.8%	1	2	0.3%	0	4	1.1%	1	6	0.6%
0	1	2.4%	0	6	1.0%	0	18	5.1%	0	24	2.5%
0	0	--	0	0	--	9	1	11.1%	9	1	11.1%
		--	0	0	--	0	1	11.1%	0	1	11.1%
		--	0	0	--	0	0	0.0%	0	0	0.0%
		--	0	0	--	0	0	0.0%	0	0	0.0%
0	0	--	0	0	--	39	8	20.5%	39	8	20.5%
		--	0	0	--	0	1	2.6%	0	1	2.6%
		--	0	0	--	0	0	0.0%	0	0	0.0%
		--	0	0	--	0	1	2.6%	0	1	2.6%
0	0	--	0	0	--	54	4	7.4%	54	4	7.4%
		--	0	0	--	0	3	5.6%	0	3	5.6%
		--	0	0	--	0	0	0.0%	0	0	0.0%
		--	0	0	--	0	5	9.3%	0	5	9.3%
42	10	23.8%	2910	140	4.8%	2084	290	13.9%	4994	430	8.6%
0	0	0.0%	1	3	0.1%	2	30	1.4%	3	33	0.7%
0	2	4.8%	3	110	3.8%	3	16	0.8%	6	126	2.5%
0	1	2.4%	0	32	1.1%	0	111	5.3%	0	143	2.9%

TABLE 7.12-J

TABLES 7.13-7.28

"Count-Weight," "Species," and "Modification" Tables
summarized by temporal unit

NOTES

Temporal unit is noted in the upper left hand corner of each table.
These tables are derived from the last rows of Tables 7.1-7.12.
See Chapter 7, Section 7.2 for discussion of the arrangement of these tables and of abbreviations employed; Tables 7.14, 7.18, 7.22, and 7.26 record percentages for counts and weights based on the data in the corresponding cells of the immediately preceding table.

Table 7.13

Gaz Tavila

	Phase	Count	Weight	Index	Phase	Count	Weight	Index	Phase	Count	Weight	Index
total	Natural	514	1651.5	3.2	6-5	14	20.0	1.4	4-3	42	150.5	3.6
med.mammal		456	940.0	2.1		12	13.0	1.1		40	114.5	2.9
lg.mammal		52	641.5	12.3		2	7.0	3.5		2	36.0	18.0
other		6	70.0	11.7		0	0.0	0.0		0	0.0	0.0
total	6E	285	675.0	2.4	5	596	2850.5	4.8	3	102	335.5	3.3
med.mammal		255	481.0	1.9		538	1419.0	2.6		93	242.0	2.6
lg.mammal		24	185.0	7.7		47	1395.5	29.7		9	86.0	9.6
other		6	9.0	1.5		11	36.0	3.3		0	7.5	0.0
total	6D	102	448.0	4.4	6-4	49	110.0	2.2	6-2	60	233.5	3.9
med.mammal		87	227.0	2.6		46	100.5	2.2		57	194.5	3.4
lg.mammal		15	209.5	14.0		3	8.0	2.7		3	30.5	10.2
other		0	11.5	0.0		0	1.5	0.0		0	8.5	0.0
total	6D-C	61	242.5	4.0	5-4	8	18.0	2.3	2	123	340.5	2.8
med.mammal		45	104.0	2.3		7	17.5	2.5		112	295.0	2.6
lg.mammal		15	132.5	8.8		0	0.0	0.0		8	34.5	4.3
other		1	6.0	6.0		1	0.5	0.5		3	11.0	3.7
total	6C	145	976.0	6.7	4	409	1502.5	3.7	2-1	95	382.0	4.0
med.mammal		122	389.5	3.2		366	960.5	2.6		86	317.5	3.7
lg.mammal		21	514.5	24.5		31	525.5	17.0		9	62.0	6.9
other		2	72.0	36.0		12	16.5	1.4		0	2.5	0.0
total	6A	22	89.0	4.0	5-3	132	799.0	6.1	1	59	157.0	2.7
med.mammal		19	47.0	2.5		111	316.5	2.9		55	133.0	2.4
lg.mammal		3	42.0	14.0		21	429.5	20.5		4	23.0	5.8
other		0	0.0	0.0		0	53.0	0.0		0	1.0	0.0

Table 7.14

Gaz Tavila

	Phase	Count	Weight	Index	Phase	Count	Weight	Index	Phase	Count	Weight	Index
total	Natural	514	1651.5	3.2	6-5	14	20.0	1.4	4-3	42	150.5	3.6
med.mammal		88.7%	56.9%	2.1		85.7%	65.0%	1.1		95.2%	76.1%	2.9
lg.mammal		10.1%	38.8%	12.3		14.3%	35.0%	3.5		4.8%	23.9%	18.0
other		1.2%	4.2%	11.7		0.0%	0.0%	0.0		0.0%	0.0%	0.0
total	6E	285	675.0	2.4	5	596	2850.5	4.8	3	102	335.5	3.3
med.mammal		89.5%	71.3%	1.9		90.3%	49.8%	2.6		91.2%	72.1%	2.6
lg.mammal		8.4%	27.4%	7.7		7.9%	49.0%	29.7		8.8%	25.6%	9.6
other		2.1%	1.3%	1.5		1.8%	1.3%	3.3		0.0%	2.2%	0.0
total	6D	102	448.0	4.4	6-4	49	110.0	2.2	6-2	60	233.5	3.9
med.mammal		85.3%	50.7%	2.6		93.9%	91.4%	2.2		95.0%	83.3%	3.4
lg.mammal		14.7%	46.8%	14.0		6.1%	7.3%	2.7		5.0%	13.1%	10.2
other		0.0%	2.6%	0.0		0.0%	1.4%	0.0		0.0%	3.6%	0.0
total	6D-C	61	242.5	4.0	5-4	8	18.0	2.3	2	123	340.5	2.8
med.mammal		73.8%	42.9%	2.3		87.5%	97.2%	2.5		91.1%	86.6%	2.6
lg.mammal		24.6%	54.6%	8.8		0.0%	0.0%	0.0		6.5%	10.1%	4.3
other		1.6%	2.5%	6.0		12.5%	2.8%	0.5		2.4%	3.2%	3.7
total	6C	145	976.0	6.7	4	409	1502.5	3.7	2-1	95	382.0	4.0
med.mammal		84.1%	39.9%	3.2		89.5%	63.9%	2.6		90.5%	83.1%	3.7
lg.mammal		14.5%	52.7%	24.5		7.6%	35.0%	17.0		9.5%	16.2%	6.9
other		1.4%	7.4%	36.0		2.9%	1.1%	1.4		0.0%	0.7%	0.0
total	6A	22	89.0	4.0	5-3	132	799.0	6.1	1	59	157.0	2.7
med.mammal		86.4%	52.8%	2.5		84.1%	39.6%	2.9		93.2%	84.7%	2.4
lg.mammal		13.6%	47.2%	14.0		15.9%	53.8%	20.5		6.8%	14.6%	5.8
other		0.0%	0.0%	0.0		0.0%	6.6%	0.0		0.0%	0.6%	0.0

Gaz Tavila

	Phase	Count	Count	-%-	Phase	Count	Count	-%-	Phase	Count	Count	-%-
O-O&C-%O/C	Natural	3	39	90.7%	6-5	0	2	66.7%	4-3	1	2	100.0%
C-Bos-%Bos		8	3	7.0%		0	0	0.0%		0	0	0.0%
O/C-oth-%oth		28	1	2.3%		2	1	33.3%		1	0	0.0%
Av/Rp-Tot-%O		0	43	27.3%		0	3	--		1	2	100.0%
O-O&C-%O/C	6E	3	24	72.7%	5	7	62	86.1%	3	0	6	100.0%
C-Bos-%Bos		3	4	12.1%		9	7	9.7%		2	0	0.0%
O/C-oth-%oth		18	5	15.2%		46	3	4.2%		4	0	0.0%
Av/Rp-Tot-%O		0	33	50.0%		0	72	43.8%		0	6	0.0%
O-O&C-%O/C	6D	1	19	90.5%	6-4	0	4	100.0%	6-2	1	8	88.9%
C-Bos-%Bos		4	2	9.5%		2	0	0.0%		3	1	11.1%
O/C-oth-%oth		14	0	0.0%		2	0	0.0%		4	0	0.0%
Av/Rp-Tot-%O		0	21	20.0%		0	4	0.0%		0	9	25.0%
O-O&C-%O/C	6D-C	0	5	100.0%	5-4	0	3	75.0%	2	0	13	92.9%
C-Bos-%Bos		2	0	0.0%		1	0	0.0%		2	1	7.1%
O/C-oth-%oth		3	0	0.0%		2	1	25.0%		11	0	0.0%
Av/Rp-Tot-%O		0	5	0.0%		0	4	0.0%		0	14	0.0%
O-O&C-%O/C	6C	1	22	88.0%	4	4	38	88.4%	2-1	0	13	92.9%
C-Bos-%Bos		6	1	4.0%		6	5	11.6%		5	1	7.1%
O/C-oth-%oth		15	2	8.0%		28	0	0.0%		8	0	0.0%
Av/Rp-Tot-%O		0	25	14.3%		1	43	40.0%		0	14	0.0%
O-O&C-%O/C	6A	0	2	66.7%	5-3	1	13	86.7%	1	0	9	81.8%
C-Bos-%Bos		0	1	33.3%		1	1	6.7%		1	2	18.2%
O/C-oth-%oth		2	0	0.0%		11	1	6.7%		8	0	0.0%
Av/Rp-Tot-%O		0	3	--		0	15	50.0%		0	11	0.0%

Table 7.15

Table 7.16

Gaz Tavila

	Phase	Count	Count	-%-	Phase	Count	Count	-%-	Phase	Count	Count	-%-
tot-rodent-%r	Natural	514	3	0.6%	6-5	14	0	0.0%	4-3	42	2	4.8%
pol-carniv-%c		0	1	0.2%		0	0	0.0%		0	0	0.0%
tool-burn-%b		1	1	0.2%		0	0	0.0%		1	2	4.8%
blow-cut-%b&c		0	0	0.0%		0	0	0.0%		0	0	0.0%
tot-rodent-%r	6E	285	5	1.8%	5	596	25	4.2%	3	102	0	0.0%
pol-carniv-%c		0	0	0.0%		2	0	0.0%		1	0	0.0%
tool-burn-%b		1	4	1.4%		1	11	1.8%		0	9	8.8%
blow-cut-%b&c		0	0	0.0%		0	1	0.2%		0	0	0.0%
tot-rodent-%r	6D	102	2	2.0%	6-4	49	0	0.0%	6-2	60	2	3.3%
pol-carniv-%c		0	0	0.0%		0	0	0.0%		0	0	0.0%
tool-burn-%b		0	0	0.0%		0	1	2.0%		1	0	0.0%
blow-cut-%b&c		0	0	0.0%		0	0	0.0%		0	0	0.0%
tot-rodent-%r	6D-C	61	3	4.9%	5-4	8	1	12.5%	2	123	5	4.1%
pol-carniv-%c		0	0	0.0%		0	0	0.0%		1	0	0.0%
tool-burn-%b		0	4	6.6%		0	0	0.0%		1	3	2.4%
blow-cut-%b&c		0	0	0.0%		0	0	0.0%		0	0	0.0%
tot-rodent-%r	6C	145	16	11.0%	4	409	12	2.9%	2-1	95	3	3.2%
pol-carniv-%c		0	0	0.0%		0	0	0.0%		0	0	0.0%
tool-burn-%b		0	3	2.1%		1	5	1.2%		2	1	1.1%
blow-cut-%b&c		0	1	0.7%		0	0	0.0%		0	1	1.1%
tot-rodent-%r	6A	22	0	0.0%	5-3	132	1	0.8%	1	59	0	0.0%
pol-carniv-%c		0	0	0.0%		0	0	0.0%		0	0	0.0%
tool-burn-%b		0	0	0.0%		0	2	1.5%		0	0	0.0%
blow-cut-%b&c		0	0	0.0%		0	0	0.0%		0	0	0.0%

Yahya VII

	Phase	Count	Weight	Index	Phase	Count	Weight	Index	Phase	Count	Weight	Index
total	E	54	257.5	4.8	B6-5	65	751.0	11.6	B3-2	59	365.0	6.2
med.mammal		37	60.0	1.6		39	205.0	5.3		43	136.5	3.2
lg.mammal		16	192.5	12.0		26	546.0	21.0		16	228.5	14.3
other		1	5.0	5.0		0	0.0	0.0		0	0.0	0.0
total	D	211	1579.5	7.5	B6-4	78	707.5	9.1	B2	955	5959.5	6.2
med.mammal		146	575.5	3.9		63	278.0	4.4		746	2169.0	2.9
lg.mammal		61	959.0	15.7		15	429.5	28.6		188	3645.5	19.4
other		4	45.0	11.3		0	0.0	0.0		21	145.0	6.9
total	C2	345	2346.5	6.8	B4	229	2581.0	11.3	B1 /	449	3704.0	8.2
med.mammal		228	657.0	2.9		134	315.0	2.4	B6-1	341	1322.5	3.9
lg.mammal		105	1651.0	15.7		90	1886.0	21.0		101	2331.0	23.1
other		12	38.5	3.2		5	380.0	76.0		7	50.5	7.2
total	C2-1	160	2685.5	16.8	B6-3	101	731.5	7.2	B	3493	20309.0	5.8
med.mammal	/ C1	79	335.0	4.2		70	241.5	3.5	Total	2704	6883.0	2.5
lg.mammal		72	2325.5	32.3		28	487.0	17.4		745	12759.5	17.1
other		9	25.0	2.8		3	3.0	1.0		44	666.5	15.1
total	C Total	505	5032.0	10.0	B5-3	1099	2602.5	2.4	B2-A	477	3391.5	7.1
med.mammal		307	992.0	3.2		919	1208.5	1.3		337	1083.0	3.2
lg.mammal		177	3976.5	22.5		177	1324.5	7.5		137	2097.0	15.3
other		21	63.5	3.0		3	69.5	23.2		3	211.5	70.5
total	B6	30	741.0	24.7	B3	428	2166.0	5.1	A	632	5537.0	8.8
med.mammal		15	100.0	6.7		334	907.0	2.7		439	1661.0	3.8
lg.mammal		15	641.0	42.7		89	1240.5	13.9		180	3671.0	20.4
other		0	0.0	0.0		5	18.5	3.7		13	205.0	15.8

Table 7.17

Table 7.18

Yahya VII

	Phase	Count	Weight	Index	Phase	Count	Weight	Index	Phase	Count	Weight	Index
total	E	54	257.5	4.8	B6-5	65	751.0	11.6	B3-2	59	365.0	6.2
med.mammal		68.5%	23.3%	1.6		60.0%	27.3%	5.3		72.9%	37.4%	3.2
lg.mammal		29.6%	74.8%	12.0		40.0%	72.7%	21.0		27.1%	62.6%	14.3
other		1.9%	1.9%	5.0		0.0%	0.0%	0.0		0.0%	0.0%	0.0
total	D	211	1579.5	7.5	B6-4	78	707.5	9.1	B2	955	5959.5	6.2
med.mammal		69.2%	36.4%	3.9		80.8%	39.3%	4.4		78.1%	36.4%	2.9
lg.mammal		28.9%	60.7%	15.7		19.2%	60.7%	28.6		19.7%	61.2%	19.4
other		1.9%	2.8%	11.3		0.0%	0.0%	0.0		2.2%	2.4%	6.9
total	C2	345	2346.5	6.8	B4	229	2581.0	11.3	B1 /	449	3704.0	8.2
med.mammal		66.1%	28.0%	2.9		58.5%	12.2%	2.4	B6-1	75.9%	35.7%	3.9
lg.mammal		30.4%	70.4%	15.7		39.3%	73.1%	21.0		22.5%	62.9%	23.1
other		3.5%	1.6%	3.2		2.2%	14.7%	76.0		1.6%	1.4%	7.2
total	C2-1	160	2685.5	16.8	B6-3	101	731.5	7.2	B	3493	20309.0	5.8
med.mammal	/ C1	49.4%	12.5%	4.2		69.3%	33.0%	3.5	Total	77.4%	33.9%	2.5
lg.mammal		45.0%	86.6%	32.3		27.7%	66.6%	17.4		21.3%	62.8%	17.1
other		5.6%	0.9%	2.8		3.0%	0.4%	1.0		1.3%	3.3%	15.1
total	C	505	5032.0	10.0	B5-3	1099	2602.5	2.4	B2-A	477	3391.5	7.1
med.mammal	Total	60.8%	19.7%	3.2		83.6%	46.4%	1.3		70.6%	31.9%	3.2
lg.mammal		35.0%	79.0%	22.5		16.1%	50.9%	7.5		28.7%	61.8%	15.3
other		4.2%	1.3%	3.0		0.3%	2.7%	23.2		0.6%	6.2%	70.5
total	B6	30	741.0	24.7	B3	428	2166.0	5.1	A	632	5537.0	8.8
med.mammal		50.0%	13.5%	6.7		78.0%	41.9%	2.7		69.5%	30.0%	3.8
lg.mammal		50.0%	86.5%	42.7		20.8%	57.3%	13.9		28.5%	66.3%	20.4
other		0.0%	0.0%	0.0		1.2%	0.9%	3.7		2.1%	3.7%	15.8

Yahya VII

	Phase	Count	Count	-%-	Phase	Count	Count	-%-	Phase	Count	Count	-%-
O-O&C-%O/C	E	2	12	80.0%	B6-5	4	21	70.0%	B3-2	1	11	64.7%
C-Bos-%Bos		3	2	13.3%		11	8	26.7%		3	6	35.3%
O/C-oth-%oth		7	1	6.7%		6	1	3.3%		7	0	0.0%
Av/Rp-Tot-%O		1	15	40.0%		2	30	26.7%		3	17	25.0%
O-O&C-%O/C	D	5	36	78.3%	B6-4	3	17	89.5%	B2	12	136	73.1%
C-Bos-%Bos		7	9	19.6%		4	2	10.5%		26	41	22.0%
O/C-oth-%oth		24	1	2.2%		10	0	0.0%		98	9	4.8%
Av/Rp-Tot-%O		0	46	41.7%		1	19	42.9%		3	186	31.6%
O-O&C-%O/C	C2	3	38	64.4%	B4	0	17	43.6%	B1 /	13	59	71.1%
C-Bos-%Bos		6	20	33.9%		4	22	56.4%	B6-1	27	20	24.1%
O/C-oth-%oth		29	1	1.7%		13	0	0.0%		19	4	4.8%
Av/Rp-Tot-%O		0	59	33.3%		0	39	0.0%		4	83	32.5%
O-O&C-%O/C	C2-1	2	16	36.4%	B6-3	2	13	81.3%	B	48	431	75.0%
C-Bos-%Bos	/ C1	7	26	59.1%		2	2	12.5%	Total	119	126	21.9%
O/C-oth-%oth		7	2	4.5%		9	1	6.3%		264	18	3.1%
Av/Rp-Tot-%O		0	44	22.2%		0	16	50.0%		19	575	28.7%
O-O&C-%O/C	C	5	54	52.4%	B5-3	4	67	88.2%	B2-A	2	65	71.4%
C-Bos-%Bos	Total	13	46	44.7%		16	8	10.5%		18	19	20.9%
O/C-oth-%oth		36	3	2.9%		47	1	1.3%		45	7	7.7%
Av/Rp-Tot-%O		0	103	27.8%		4	76	20.0%		4	91	10.0%
O-O&C-%O/C	B6	1	11	64.7%	B3	8	79	85.9%	A	17	125	72.7%
C-Bos-%Bos		3	6	35.3%		23	11	12.0%		25	46	26.7%
O/C-oth-%oth		7	0	0.0%		48	2	2.2%		83	1	0.6%
Av/Rp-Tot-%O		0	17	25.0%		2	92	25.8%		19	172	40.5%

Table 7.19

Table 7.20

Yahya VII

	Phase	Count	Count	-%-	Phase	Count	Count	-%-	Phase	Count	Count	-%-
tot-rodent-%r	E	54	4	7.4%	B6-5	65	10	15.4%	B3-2	59	5	8.5%
pol-carniv-%c		0	0	0.0%		0	0	0.0%		0	3	5.1%
tool-burn-%b		0	3	5.6%		0	2	3.1%		0	0	0.0%
blow-cut-%b&c		0	0	0.0%		0	0	0.0%		1	1	3.4%
tot-rodent-%r	D	211	7	3.3%	B6-4	78	6	7.7%	B2	955	103	10.8%
pol-carniv-%c		1	0	0.0%		0	0	0.0%		0	3	0.3%
tool-burn-%b		0	46	21.8%		1	0	0.0%		3	39	4.1%
blow-cut-%b&c		0	0	0.0%		0	0	0.0%		2	2	0.4%
tot-rodent-%r	C2	345	18	5.2%	B4	229	10	4.4%	B1 /	449	46	10.2%
pol-carniv-%c		0	5	1.4%		0	1	0.4%	B6-1	0	0	0.0%
tool-burn-%b		1	8	2.3%		0	1	0.4%		4	12	2.7%
blow-cut-%b&c		2	2	1.2%		3	1	1.7%		1	2	0.7%
tot-rodent-%r	C2-1	160	8	5.0%	B6-3	101	8	7.9%	B	3493	218	6.2%
pol-carniv-%c	/ C1	0	1	0.6%		0	0	0.0%	Total	0	12	0.3%
tool-burn-%b		1	3	1.9%		1	0	0.0%		12	284	8.1%
blow-cut-%b&c		1	1	1.3%		0	0	0.0%		7	8	0.4%
tot-rodent-%r	C	505	26	5.1%	B5-3	1099	10	0.9%	B2-A	477	23	4.8%
pol-carniv-%c	Total	0	6	1.2%		0	2	0.2%		1	3	0.6%
tool-burn-%b		2	11	2.2%		3	222	20.2%		2	7	1.5%
blow-cut-%b&c		3	3	1.2%		0	0	0.0%		0	6	1.3%
tot-rodent-%r	B6	30	6	20.0%	B3	428	14	3.3%	A	632	84	13.3%
pol-carniv-%c		0	0	0.0%		0	3	0.7%		4	1	0.2%
tool-burn-%b		0	1	3.3%		0	7	1.6%		5	8	1.3%
blow-cut-%b&c		0	0	0.0%		0	2	0.5%		0	1	0.2%

Yahya VI-V

	Phase	Count	Weight	Index	Phase	Count	Weight	Index	Phase	Count	Weight	Index
total	VII A	405	4911.0	12.1	VI A	188	2182.5	11.6	V C	388	2847.0	7.3
med.mammal	- VI B/A	228	1023.0	4.5	early	104	375.0	3.6		250	936.5	3.7
lg.mammal		172	3563.5	20.7		84	1714.0	20.4		121	1757.5	14.5
other		5	324.5	64.9		0	93.5	0.0		17	153.0	9.0
total	VI B2	1310	11532.5	8.8	VI A	819	9294.0	11.3	V B	505	3302.0	6.5
med.mammal		897	3257.0	3.6	middle	479	1547.0	3.2		338	1125.0	3.3
lg.mammal		399	7118.0	17.8		316	6229.5	19.7		158	2040.5	12.9
other		14	1157.5	82.7		24	1517.5	63.2		9	136.5	15.2
total	VI B2-1	164	1718.0	10.5	VI A	274	3824.0	14.0	V A2	329	1487.5	4.5
med.mammal		86	375.0	4.4	late	131	676.0	5.2		231	796.5	3.4
lg.mammal		78	1288.0	16.5		138	3137.5	22.7		89	625.5	7.0
other		0	55.0	0.0		5	10.5	2.1		9	65.5	7.3
total	VI B1	183	3258.0	17.8	VI A	1281	15300.5	11.9	V A1	439	4452.5	10.1
med.mammal		105	439.0	4.2	Total	714	2598.0	3.6		306	1188.0	3.9
lg.mammal		77	2815.0	36.6		538	11081.0	20.6		107	3188.5	29.8
other		1	4.0	4.0		29	1621.5	55.9		26	76.0	2.9
total	VI B	1657	16508.5	10.0	VI	3001	32667.5	10.9	V A	768	5940.0	7.7
med.mammal	Total	1088	4071.0	3.7	Total	1840	6926.5	3.8	Total	537	1984.5	3.7
lg.mammal		554	11221.0	20.3		1117	22903.0	20.5		196	3814.0	19.5
other		15	1216.5	81.1		44	2838.0	64.5		35	141.5	4.0
total	VI B1-A	63	858.5	13.6	VI A/B	121	1046.5	8.6	V C/A	218	1154.5	5.3
med.mammal		38	257.5	6.8	- V C	80	309.5	3.9	C/B	165	440.5	2.7
lg.mammal		25	601.0	24.0		38	724.0	19.1	B/A	52	686.0	13.2
other		0	0.0	0.0		3	13.0	4.3		1	28.0	28.0

Table 7.21

Table 7.22

Yahya VI-V

	Phase	Count	Weight	Index	Phase	Count	Weight	Index	Phase	Count	Weight	Index
total	VII A	405	4911.0	12.1	VI A	188	2182.5	11.6	V C	388	2847.0	7.3
med.mammal	- VI B/A	56.3%	20.8%	4.5	early	55.3%	17.2%	3.6		64.4%	32.9%	3.7
lg.mammal		42.5%	72.6%	20.7		44.7%	78.5%	20.4		31.2%	61.7%	14.5
other		1.2%	6.6%	64.9		0.0%	4.3%	0.0		4.4%	5.4%	9.0
total	VI B2	1310	11532.5	8.8	VI A	819	9294.0	11.3	V B	505	3302.0	6.5
med.mammal		68.5%	28.0%	3.6	middle	58.5%	16.6%	3.2		66.9%	34.1%	3.3
lg.mammal		30.5%	61.9%	17.8		38.6%	67.0%	19.7		31.3%	61.8%	12.9
other		1.1%	10.0%	82.7		2.9%	16.3%	63.2		1.8%	4.1%	15.2
total	VI B2-1	164	1718.0	10.5	VI A	274	3824.0	14.0	V A2	329	1487.5	4.5
med.mammal		52.4%	21.8%	4.4	late	47.8%	17.7%	5.2		70.2%	53.5%	3.4
lg.mammal		47.6%	75.0%	16.5		50.4%	82.0%	22.7		27.1%	42.1%	7.0
other		0.0%	3.2%	0.0		1.8%	0.3%	2.1		2.7%	4.4%	7.3
total	VI B1	183	3258.0	17.8	VI A	1281	15300.5	11.9	V A1	439	4452.5	10.1
med.mammal		57.4%	13.5%	4.2	Total	55.7%	17.0%	3.6		69.7%	26.7%	3.9
lg.mammal		42.1%	86.4%	36.6		42.0%	72.4%	20.6		24.4%	71.6%	29.8
other		0.5%	0.1%	4.0		2.3%	10.6%	55.9		5.9%	1.7%	2.9
total	VI B	1657	16508.5	10.0	VI	3001	32667.5	10.9	V A	768	5940.0	7.7
med.mammal	Total	65.7%	24.5%	3.7	Total	61.3%	21.1%	3.8	Total	69.9%	33.4%	3.7
lg.mammal		33.4%	68.1%	20.3		37.2%	70.2%	20.5		25.5%	64.2%	19.5
other		0.9%	7.4%	81.1		1.5%	8.7%	64.5		4.6%	2.4%	4.0
total	VI B1-A	63	858.5	13.6	VI A/B	121	1046.5	8.6	V C/A	218	1154.5	5.3
med.mammal		60.3%	30.0%	6.8	- V C	66.1%	29.6%	3.9	C/B	75.7%	38.2%	2.7
lg.mammal		39.7%	70.0%	24.0		31.4%	69.2%	19.1	B/A	23.9%	59.4%	13.2
other		0.0%	0.0%	0.0		2.5%	1.2%	4.3		0.5%	2.4%	28.0

Yahya VI-V

	Phase	Count	Count	-%-	Phase	Count	Count	-%-	Phase	Count	Count	-%-
O-O&C-%O/C	VII A	17	62	51.7%	VI A	1	20	46.5%	V C	9	66	64.1%
C-Bos-%Bos	- VI B/A	15	52	43.3%	early	3	19	44.2%		18	21	20.4%
O/C-oth-%oth		30	6	5.0%		16	4	9.3%		39	16	15.5%
Av/Rp-Tot-%O		5	120	53.1%		0	43	25.0%		2	103	33.3%
O-O&C-%O/C	VI B2	32	236	71.7%	VI A	10	86	50.3%	V B	17	88	72.7%
C-Bos-%Bos		55	80	24.3%	middle	12	82	48.0%		26	29	24.0%
O/C-oth-%oth		149	13	4.0%		64	3	1.8%		45	4	3.3%
Av/Rp-Tot-%O		11	329	36.8%		1	171	45.5%		1	121	39.5%
O-O&C-%O/C	VI B2-1	1	15	44.1%	VI A	2	35	42.7%	V A2	12	65	86.7%
C-Bos-%Bos		6	16	47.1%	late	7	41	50.0%		18	9	12.0%
O/C-oth-%oth		8	3	8.8%		26	6	7.3%		35	1	1.3%
Av/Rp-Tot-%O		0	34	14.3%		0	82	22.2%		0	75	40.0%
O-O&C-%O/C	VI B1	4	30	53.6%	VI A	13	141	47.6%	V A1	14	91	81.3%
C-Bos-%Bos		8	25	44.6%	Total	22	142	48.0%		29	16	14.3%
O/C-oth-%oth		18	1	1.8%		106	13	4.4%		48	5	4.5%
Av/Rp-Tot-%O		0	56	33.3%		1	296	37.1%		2	112	32.6%
O-O&C-%O/C	VI B	37	281	67.1%	VI	54	441	59.8%	V A	26	156	83.4%
C-Bos-%Bos	Total	69	121	28.9%	Total	101	267	36.2%	Total	47	25	13.4%
O/C-oth-%oth		175	17	4.1%		286	30	4.1%		83	6	3.2%
Av/Rp-Tot-%O		11	419	34.9%		12	738	34.8%		2	187	35.6%
O-O&C-%O/C	VI B1-A	4	19	82.6%	VI A/B	3	26	68.4%	V C/A	4	32	82.1%
C-Bos-%Bos		10	4	17.4%	- V C	6	12	31.6%	C/B	11	6	15.4%
O/C-oth-%oth		5	0	0.0%		17	0	0.0%	B/A	17	1	2.6%
Av/Rp-Tot-%O		0	23	28.6%		0	38	33.3%		0	39	26.7%

Table 7.23

Yahya VI-V

	Phase	Count	Count	-%-	Phase	Count	Count	-%-	Phase	Count	Count	-%-
tot-rodent-%r	VII A	405	18	4.4%	VI A	188	9	4.8%	V C	388	49	12.6%
pol-carniv-%c	- VI B/A	1	5	1.2%	early	2	6	3.2%		1	2	0.5%
tool-burn-%b		2	8	2.0%		0	2	1.1%		0	10	2.6%
blow-cut-%b&c		1	7	2.0%		0	2	1.1%		0	9	2.3%
tot-rodent-%r	VI B2	1310	127	9.7%	VI A	819	30	3.7%	V B	505	48	9.5%
pol-carniv-%c		1	5	0.4%	middle	1	5	0.6%		0	7	1.4%
tool-burn-%b		3	25	1.9%		3	8	1.0%		2	8	1.6%
blow-cut-%b&c		2	6	0.6%		1	5	0.7%		2	9	2.2%
tot-rodent-%r	VI B2-1	164	8	4.9%	VI A	274	9	3.3%	V A2	329	36	10.9%
pol-carniv-%c		0	3	1.8%	late	1	6	2.2%		0	2	0.6%
tool-burn-%b		0	2	1.2%		3	4	1.5%		1	2	0.6%
blow-cut-%b&c		0	6	3.7%		0	6	2.2%		1	5	1.8%
tot-rodent-%r	VI B1	183	11	6.0%	VI A	1281	48	3.7%	V A1	439	61	13.9%
pol-carniv-%c		2	0	0.0%	Total	4	17	1.3%		9	0	0.0%
tool-burn-%b		6	4	2.2%		6	14	1.1%		1	50	11.4%
blow-cut-%b&c		0	3	1.6%		1	13	1.1%		0	5	1.1%
tot-rodent-%r	VI B	1657	146	8.8%	VI	3001	202	6.7%	V A	768	97	12.6%
pol-carniv-%c	Total	3	8	0.5%	Total	8	25	0.8%	Total	9	2	0.3%
tool-burn-%b		9	31	1.9%		15	47	1.6%		2	52	6.8%
blow-cut-%b&c		2	15	1.0%		3	29	1.1%		1	10	1.4%
tot-rodent-%r	VI B1-A	63	8	12.7%	VI A/B	121	15	12.4%	V C/A	218	14	6.4%
pol-carniv-%c		1	0	0.0%	- V C	0	3	2.5%	C/B	0	1	0.5%
tool-burn-%b		0	2	3.2%		2	3	2.5%	B/A	1	7	3.2%
blow-cut-%b&c		0	1	1.6%		0	1	0.8%		1	2	1.4%

Table 7.24

Table 7.25

Yahya IV C

	Phase	Count	Weight	Index	Phase	Count	Weight	Index	Phase	Count	Weight	Index
total	2	459	493.5	1.1	2	1034	8674.0	8.4	1	189	785.5	4.2
med.mammal	int.	424	404.5	1.0	Total	898	4636.0	5.2	E.side	176	527.0	3.0
lg.mammal	scr.	33	88.0	2.7	not	123	3994.5	32.5	not	11	247.0	22.5
other		2	1.0	0.5	scr.	13	43.5	3.3	scr.	2	11.5	5.8
total	2	396	3924.5	9.9	2	3332	11595.5	3.5	1	1008	6597.5	6.5
med.mammal	int.	343	1657.5	4.8	Total	3025	7111.5	2.4	Total	907	4029.5	4.4
lg.mammal	not	49	2260.5	46.1		238	4405.0	18.5	not	93	2539.5	27.3
other	scr.	4	6.5	1.6		69	79.0	1.1	scr.	8	28.5	3.6
total	2	158	709.0	4.5	1	257	1864.0	7.3	1	1620	7669.5	4.7
med.mammal	ext.:F&G	129	473.5	3.7	int.	236	1507.0	6.4	Total	1484	4936.5	3.3
lg.mammal	not	25	201.0	8.0	not	20	354.0	17.7		120	2657.5	22.1
other	scr.	4	34.5	8.6	scr.	1	3.0	3.0		16	75.5	4.7
total	2	1839	2428.0	1.3	1	134	664.0	5.0	2-1	42	318.0	7.6
med.mammal	East ct.	1703	2071.0	1.2	Area G	119	477.0	4.0	not	42	318.0	7.6
lg.mammal	scr.	82	322.5	3.9	early	14	186.5	13.3	scr.	0	0.0	0.0
other		54	34.5	0.6	not scr.	1	0.5	0.5		0	0.0	0.0
total	2	480	4040.5	8.4	1	428	3284.0	7.7	Total	2910	3993.5	1.4
med.mammal	East ct.	426	2505.0	5.9	Area G	376	1518.5	4.0	scr.	2704	3382.5	1.3
lg.mammal	not	49	1533.0	31.3	late	48	1752.0	36.5		142	528.5	3.7
other	scr.	5	2.5	0.5	not scr.	4	13.5	3.4		64	82.5	1.3
total	2	2298	2921.5	1.3	1	612	1072.0	1.8	Total	2084	15589.5	7.5
med.mammal	Total	2127	2475.5	1.2	E.side	577	907.0	1.6	not	1847	8983.5	4.9
lg.mammal	scr.	115	410.5	3.6	scr.	27	118.0	4.4	scr.	216	6534.0	30.3
other		56	35.5	0.6		8	47.0	5.9		21	72.0	3.4

Yahya IV C

	Phase	Count	Weight	Index	Phase	Count	Weight	Index	Phase	Count	Weight	Index
total	2	459	493.5	1.1	2	1034	8674.0	8.4	1	189	785.5	4.2
med.mammal	int.	92.4%	82.0%	1.0	Total	86.8%	53.4%	5.2	E.side	93.1%	67.1%	3.0
lg.mammal	scr.	7.2%	17.8%	2.7	not	11.9%	46.1%	32.5	not	5.8%	31.4%	22.5
other		0.4%	0.2%	0.5	scr.	1.3%	0.5%	3.3	scr.	1.1%	1.5%	5.8
total	2	396	3924.5	9.9	2	3332	11595.5	3.5	1	1008	6597.5	6.5
med.mammal	int.	86.6%	42.2%	4.8	Total	90.8%	61.3%	2.4	Total	90.0%	61.1%	4.4
lg.mammal	not	12.4%	57.6%	46.1		7.1%	38.0%	18.5	not	9.2%	38.5%	27.3
other	scr.	1.0%	0.2%	1.6		2.1%	0.7%	1.1	scr.	0.8%	0.4%	3.6
total	2	158	709.0	4.5	1	257	1864.0	7.3	1	1620	7669.5	4.7
med.mammal	ext.:F&G	81.6%	66.8%	3.7	int.	91.8%	80.8%	6.4	Total	91.6%	64.4%	3.3
lg.mammal	not	15.8%	28.3%	8.0	not	7.8%	19.0%	17.7		7.4%	34.7%	22.1
other	scr.	2.5%	4.9%	8.6	scr.	0.4%	0.2%	3.0		1.0%	1.0%	4.7
total	2	1839	2428.0	1.3	1	134	664.0	5.0	2-1	42	318.0	7.6
med.mammal	East ct.	92.6%	85.3%	1.2	Area G	88.8%	71.8%	4.0	not	100.0%	100.0%	7.6
lg.mammal	scr.	4.5%	13.3%	3.9	early	10.4%	28.1%	13.3	scr.	0.0%	0.0%	0.0
other		2.9%	1.4%	0.6	not scr.	0.7%	0.1%	0.5		0.0%	0.0%	0.0
total	2	480	4040.5	8.4	1	428	3284.0	7.7	Total	2910	3993.5	1.4
med.mammal	East ct.	88.8%	62.0%	5.9	Area G	87.9%	46.2%	4.0	scr.	92.9%	84.7%	1.3
lg.mammal	not	10.2%	37.9%	31.3	late	11.2%	53.3%	36.5		4.9%	13.2%	3.7
other	scr.	1.0%	0.1%	0.5	not scr.	0.9%	0.4%	3.4		2.2%	2.1%	1.3
total	2	2298	2921.5	1.3	1	612	1072.0	1.8	Total	2084	15589.5	7.5
med.mammal	Total	92.6%	84.7%	1.2	E.side	94.3%	84.6%	1.6	not	88.6%	57.6%	4.9
lg.mammal	scr.	5.0%	14.1%	3.6	scr.	4.4%	11.0%	4.4	scr.	10.4%	41.9%	30.3
other		2.4%	1.2%	0.6		1.3%	4.4%	5.9		1.0%	0.5%	3.4

Table 7.26

Table 7.27

Yahya IV C

	Phase	Count	Count	-%-	Phase	Count	Count	-%-	Phase	Count	Count	-%-
0-0&C-%0/C	2	8	42	95.5%	2	56	278	89.4%	1	1	38	90.5%
C-Bos-%Bos	int.	14	1	2.3%	Total	112	27	8.7%	E.side	16	4	9.5%
0/C-oth-%oth	scr.	20	1	2.3%	not	110	6	1.9%	not	21	0	0.0%
Av/Rp-Tot-%0		5	44	36.4%	scr.	4	311	33.3%	scr.	1	42	5.9%
0-0&C-%0/C	2	15	95	85.6%	2	87	531	90.6%	1	38	320	89.9%
C-Bos-%Bos	int.	44	16	14.4%	Total	179	32	5.5%	Total	139	29	8.1%
0/C-oth-%oth	not	36	0	0.0%		265	23	3.9%	not	143	7	2.0%
Av/Rp-Tot-%0	scr.	2	111	25.4%		16	586	32.7%	scr.	10	356	21.5%
0-0&C-%0/C	2	5	29	85.3%	1	15	111	94.1%	1	42	405	91.6%
C-Bos-%Bos	ext.:F&G	10	3	8.8%	int.	55	4	3.4%	Total	158	29	6.6%
0/C-oth-%oth	not	14	2	5.9%	not	41	3	2.5%		205	8	1.8%
Av/Rp-Tot-%0	scr.	0	34	33.3%	scr.	5	118	21.4%		16	442	21.0%
0-0&C-%0/C	2	23	211	91.3%	1	3	45	88.2%	2-1	1	14	93.3%
C-Bos-%Bos	East ct.	53	4	1.7%	Area G	18	4	7.8%	not	9	0	0.0%
0/C-oth-%oth	scr.	135	16	6.9%	early	24	2	3.9%	scr.	4	1	6.7%
Av/Rp-Tot-%0		7	231	30.3%	not scr.	1	51	14.3%		1	15	10.0%
0-0&C-%0/C	2	36	154	92.8%	1	19	126	86.9%	Total	35	338	93.6%
C-Bos-%Bos	East ct.	58	8	4.8%	Area G	50	17	11.7%	scr.	86	5	1.4%
0/C-oth-%oth	not	60	4	2.4%	late	57	2	1.4%		217	18	5.0%
Av/Rp-Tot-%0	scr.	2	166	38.3%	not scr.	3	145	27.5%		18	361	28.9%
0-0&C-%0/C	2	31	253	92.0%	1	4	85	98.8%	Total	95	612	89.7%
C-Bos-%Bos	Total	67	5	1.8%	E.side	19	0	0.0%	not	260	56	8.2%
0/C-oth-%oth	scr.	155	17	6.2%	scr.	62	1	1.2%	scr.	257	14	2.1%
Av/Rp-Tot-%0		12	275	31.6%		6	86	17.4%		15	682	26.8%

Yahya IV C

	Phase	Count	Count	-%-	Phase	Count	Count	-%-	Phase	Count	Count	-%-
tot-rodent-%r	2	459	32	7.0%	2	1034	153	14.8%	1	189	12	6.3%
pol-carniv-%c	int.	0	0	0.0%	Total	1	15	1.5%	E.side	0	1	0.5%
tool-burn-%b	scr.	0	3	0.7%	not	3	6	0.6%	not	0	1	0.5%
blow-cut-%b&c		0	5	1.1%	scr.	0	61	5.9%	scr.	0	4	2.1%
tot-rodent-%r	2	396	48	12.1%	2	3332	269	8.1%	1	1008	127	12.6%
pol-carniv-%c	int.	0	7	1.8%	Total	2	17	0.5%	Total	1	15	1.5%
tool-burn-%b	not	1	1	0.3%		5	114	3.4%	not	0	8	0.8%
blow-cut-%b&c	scr.	0	28	7.1%		0	87	2.6%	scr.	0	49	4.9%
tot-rodent-%r	2	158	20	12.7%	1	257	51	19.8%	1	1620	151	9.3%
pol-carniv-%c	ext.:F&G	0	1	0.6%	int.	0	5	1.9%	Total	1	16	1.0%
tool-burn-%b	not	1	0	0.0%	not	0	0	0.0%		1	10	0.6%
blow-cut-%b&c	scr.	0	3	1.9%	scr.	0	22	8.6%		0	55	3.4%
tot-rodent-%r	2	1839	84	4.6%	1	134	16	11.9%	2-1	42	10	23.8%
pol-carniv-%c	East ct.	1	2	0.1%	Area G	0	1	0.7%	not	0	0	0.0%
tool-burn-%b	scr.	2	105	5.7%	early	0	1	0.7%	scr.	0	2	4.8%
blow-cut-%b&c		0	21	1.1%	not scr.	0	6	4.5%		0	1	2.4%
tot-rodent-%r	2	480	85	17.7%	1	428	48	11.2%	Total	2910	140	4.8%
pol-carniv-%c	East ct.	1	7	1.5%	Area G	1	8	1.9%	scr.	1	3	0.1%
tool-burn-%b	not	1	5	1.0%	late	0	6	1.4%		3	110	3.8%
blow-cut-%b&c	scr.	0	30	6.3%	not scr.	0	17	4.0%		0	32	1.1%
tot-rodent-%r	2	2298	116	5.0%	1	612	24	3.9%	Total	2084	290	13.9%
pol-carniv-%c	Total	1	2	0.1%	E.side	0	1	0.2%	not	2	30	1.4%
tool-burn-%b	scr.	2	108	4.7%	scr.	1	2	0.3%	scr.	3	16	0.8%
blow-cut-%b&c		0	26	1.1%		0	6	1.0%		0	111	5.3%

Table 7.28

TABLES 7.29-7.56

"Count-Weight," "Species," and "Modification" Tables summarized by context type

NOTES

Temporal unit is noted in the upper left hand corner of each table.
These tables are derived from summary columns of Tables 7.1-7.12.
See Chapter 7, Section 7.2 for discussion of the arrangement of these tables and of abbreviations employed; Tables 7.30, 7.34, 7.38, 7.42, 7.46, 7.50, and 7.54 record percentages for counts and weights based on the data in the corresponding cells of the immediately preceding table.

Table 7.29

Gaz Tavila

Context:		Count	Weight	Index	Context:		Count	Weight	Index
RUBBLE	total	0	0.0	0.0	MIDDEN	total	0	0.0	0.0
	med.mammal	0	0.0	0.0		med.mammal	0	0.0	0.0
	lg.mammal	0	0.0	0.0		lg.mammal	0	0.0	0.0
	other	0	0.0	0.0		other	0	0.0	0.0
WALLS	total	12	18.5	1.5	ROOM FILL IN & ASSOCIATED	total	549	1819.0	3.3
	med.mammal	10	11.5	1.2		med.mammal	484	1213.0	2.5
	lg.mammal	2	7.0	3.5		lg.mammal	54	563.0	10.4
	other	0	0.0	0.0		other	11	43.0	3.9
OCCUPATION IN	total	212	716.5	3.4	UNDIFFER-ENTIATED FILL OUT	total	676	2688.5	4.0
	med.mammal	189	489.5	2.6		med.mammal	592	1294.0	2.2
	lg.mammal	11	215.5	19.6		lg.mammal	78	1235.0	15.8
	other	12	11.5	1.0		other	6	159.5	26.6
OCCUPATION OUT & ASSOCIATED	total	390	1942.5	5.0	PLATFORM OR LEVELING	total	112	380.0	3.4
	med.mammal	349	1041.5	3.0		med.mammal	103	297.5	2.9
	lg.mammal	41	840.5	20.5		lg.mammal	8	82.0	10.3
	other	0	60.5	0.0		other	1	0.5	0.5
OCCUPATION & FILL IN	total	151	417.5	2.8	MIXED OR OTHER	total	209	506.5	2.4
	med.mammal	135	318.5	2.4		med.mammal	200	441.0	2.2
	lg.mammal	16	94.0	5.9		lg.mammal	9	55.5	6.2
	other	0	5.0	0.0		other	0	10.0	0.0
OCCUPATION & FILL OUT & ASSOCIATED	total	507	2492.0	4.9	TOTAL	total	2818	10981.0	3.9
	med.mammal	445	1205.5	2.7		med.mammal	2507	6312.0	2.5
	lg.mammal	50	1270.0	25.4		lg.mammal	269	4362.5	16.2
	other	12	16.5	1.4		other	42	306.5	7.3

Table 7.30

Gaz Tavila

Context:		Count	Weight	Index	Context:		Count	Weight	Index
RUBBLE	total	0	0.0	0.0	MIDDEN	total	0	0.0	0.0
	med.mammal	0.0%	0.0%	0.0		med.mammal	0.0%	0.0%	0.0
	lg.mammal	0.0%	0.0%	0.0		lg.mammal	0.0%	0.0%	0.0
	other	0.0%	0.0%	0.0		other	0.0%	0.0%	0.0
WALLS	total	12	18.5	1.5	ROOM FILL IN & ASSOCIATED	total	549	1819.0	3.3
	med.mammal	83.3%	62.2%	1.2		med.mammal	88.2%	66.7%	2.5
	lg.mammal	16.7%	37.8%	3.5		lg.mammal	9.8%	31.0%	10.4
	other	0.0%	0.0%	0.0		other	2.0%	2.4%	3.9
OCCUPATION IN	total	212	716.5	3.4	UNDIFFER-ENTIATED FILL OUT	total	676	2688.5	4.0
	med.mammal	89.2%	68.3%	2.6		med.mammal	87.6%	48.1%	2.2
	lg.mammal	5.2%	30.1%	19.6		lg.mammal	11.5%	45.9%	15.8
	other	5.7%	1.6%	1.0		other	0.9%	5.9%	26.6
OCCUPATION OUT & ASSOCIATED	total	390	1942.5	5.0	PLATFORM OR LEVELING	total	112	380.0	3.4
	med.mammal	89.5%	53.6%	3.0		med.mammal	92.0%	78.3%	2.9
	lg.mammal	10.5%	43.3%	20.5		lg.mammal	7.1%	21.6%	10.3
	other	0.0%	3.1%	0.0		other	0.9%	0.1%	0.5
OCCUPATION & FILL IN	total	151	417.5	2.8	MIXED OR OTHER	total	209	506.5	2.4
	med.mammal	89.4%	76.3%	2.4		med.mammal	95.7%	87.1%	2.2
	lg.mammal	10.6%	22.5%	5.9		lg.mammal	4.3%	11.0%	6.2
	other	0.0%	1.2%	0.0		other	0.0%	2.0%	0.0
OCCUPATION & FILL OUT & ASSOCIATED	total	507	2492.0	4.9	TOTAL	total	2818	10981.0	3.9
	med.mammal	87.8%	48.4%	2.7		med.mammal	89.0%	57.5%	2.5
	lg.mammal	9.9%	51.0%	25.4		lg.mammal	9.5%	39.7%	16.2
	other	2.4%	0.7%	1.4		other	1.5%	2.8%	7.3

Gaz Tavila

Context:		Count	Count	--%--	Context:		Count	Count	--%--
RUBBLE	0-0&C-%0/C	0	0	--	MIDDEN	0-0&C-%0/C	0	0	--
	C-Bos-%Bos	0	0	--		C-Bos-%Bos	0	0	--
	0/C-oth-%oth	0	0	--		0/C-oth-%oth	0	0	--
	Av/Rp-Tot-%0	0	0	--		Av/Rp-Tot-%0	0	0	--
WALLS	0-0&C-%0/C	0	1	100.0%	ROOM FILL IN & ASSOCIATED	0-0&C-%0/C	2	55	78.6%
	C-Bos-%Bos	0	0	0.0%		C-Bos-%Bos	14	8	11.4%
	0/C-oth-%oth	1	0	0.0%		0/C-oth-%oth	39	7	10.0%
	Av/Rp-Tot-%0	0	1	--		Av/Rp-Tot-%0	1	70	12.5%
OCCUPATION IN	0-0&C-%0/C	2	22	84.6%	UNDIFFER-ENTIATED FILL OUT	0-0&C-%0/C	5	58	89.2%
	C-Bos-%Bos	5	3	11.5%		C-Bos-%Bos	13	4	6.2%
	0/C-oth-%oth	15	1	3.8%		0/C-oth-%oth	40	3	4.6%
	Av/Rp-Tot-%0	0	26	28.6%		Av/Rp-Tot-%0	0	65	27.8%
OCCUPATION OUT & ASSOCIATED	0-0&C-%0/C	4	39	88.6%	PLATFORM OR LEVELING	0-0&C-%0/C	0	21	95.5%
	C-Bos-%Bos	7	4	9.1%		C-Bos-%Bos	3	1	4.5%
	0/C-oth-%oth	28	1	2.3%		0/C-oth-%oth	18	0	0.0%
	Av/Rp-Tot-%0	0	44	36.4%		Av/Rp-Tot-%0	0	22	0.0%
OCCUPATION & FILL IN	0-0&C-%0/C	0	15	88.2%	MIXED OR OTHER	0-0&C-%0/C	3	21	91.3%
	C-Bos-%Bos	2	2	11.8%		C-Bos-%Bos	5	1	4.3%
	0/C-oth-%oth	13	0	0.0%		0/C-oth-%oth	13	1	4.3%
	Av/Rp-Tot-%0	1	17	0.0%		Av/Rp-Tot-%0	0	23	37.5%
OCCUPATION & FILL OUT & ASSOCIATED	0-0&C-%0/C	6	52	88.1%	TOTAL	0-0&C-%0/C	22	284	86.9%
	C-Bos-%Bos	6	6	10.2%		C-Bos-%Bos	55	29	8.9%
	0/C-oth-%oth	40	1	1.7%		0/C-oth-%oth	207	14	4.3%
	Av/Rp-Tot-%0	0	59	50.0%		Av/Rp-Tot-%0	2	327	28.6%

Table 7.31

Table 7.32

Gaz Tavila Context:		Count	Count	-%-	Context:		Count	Count	-%-
RUBBLE	tot-rodent-%r	0	0	--	MIDDEN	tot-rodent-%r	0	0	--
	pol-carniv-%c	0	0	--		pol-carniv-%c	0	0	--
	tool-burn-%b	0	0	--		tool-burn-%b	0	0	--
	blow-cut-%b&c	0	0	--		blow-cut-%b&c	0	0	--
WALLS	tot-rodent-%r	12	0	0.0%	ROOM FILL IN & ASSOCIATED	tot-rodent-%r	549	23	3.8%
	pol-carniv-%c	0	0	0.0%		pol-carniv-%c	0	0	0.0%
	tool-burn-%b	0	0	0.0%		tool-burn-%b	5	13	2.4%
	blow-cut-%b&c	0	0	0.0%		blow-cut-%b&c	0	1	0.2%
OCCUPATION IN	tot-rodent-%r	212	17	8.0%	UNDIFFER-ENTIATED FILL OUT	tot-rodent-%r	676	12	1.8%
	pol-carniv-%c	1	0	0.0%		pol-carniv-%c	0	1	0.1%
	tool-burn-%b	1	6	2.8%		tool-burn-%b	1	1	0.1%
	blow-cut-%b&c	0	0	0.0%		blow-cut-%b&c	0	0	0.0%
OCCUPATION OUT & ASSOCIATED	tot-rodent-%r	390	7	1.8%	PLATFORM OR LEVELING	tot-rodent-%r	112	3	2.7%
	pol-carniv-%c	1	0	0.0%		pol-carniv-%c	0	0	0.0%
	tool-burn-%b	0	11	2.8%		tool-burn-%b	0	2	1.8%
	blow-cut-%b&c	0	0	0.0%		blow-cut-%b&c	0	0	0.0%
OCCUPATION & FILL IN	tot-rodent-%r	151	2	1.3%	MIXED OR OTHER	tot-rodent-%r	209	4	1.9%
	pol-carniv-%c	0	0	0.0%		pol-carniv-%c	0	0	0.0%
	tool-burn-%b	1	3	2.0%		tool-burn-%b	1	2	1.0%
	blow-cut-%b&c	0	0	0.0%		blow-cut-%b&c	0	0	0.0%
OCCUPATION & FILL OUT & ASSOCIATED	tot-rodent-%r	507	12	2.4%	TOTAL	tot-rodent-%r	2818	80	2.8%
	pol-carniv-%c	2	0	0.0%		pol-carniv-%c	4	1	0.0%
	tool-burn-%b	0	8	1.6%		tool-burn-%b	9	46	1.6%
	blow-cut-%b&c	0	2	0.4%		blow-cut-%b&c	0	3	0.1%

Table 7.33

Yahya VII

Context:		Count	Weight	Index	Context:		Count	Weight	Index
RUBBLE	total	16	333.0	20.8	MIDDEN	total	1290	4670.5	3.6
	med.mammal	10	63.5	6.4		med.mammal	1023	1571.0	1.5
	lg.mammal	6	269.5	44.9		lg.mammal	255	2953.5	11.6
	other	0	0.0	0.0		other	12	146.0	12.2
WALLS	total	0	0.0	0.0	ROOM FILL IN & ASSOCIATED	total	569	4814.0	8.5
	med.mammal	0	0.0	0.0		med.mammal	359	1257.0	3.5
	lg.mammal	0	0.0	0.0		lg.mammal	197	3479.5	17.7
	other	0	0.0	0.0		other	13	77.5	6.0
OCCUPATION IN	total	597	2731.5	4.6	UNDIFFER-ENTIATED FILL OUT	total	921	7634.0	8.3
	med.mammal	484	1389.0	2.9		med.mammal	625	1952.5	3.1
	lg.mammal	101	1265.0	12.5		lg.mammal	278	5362.0	19.3
	other	12	77.5	6.5		other	18	319.5	17.8
OCCUPATION OUT & ASSOCIATED	total	192	2587.0	13.5	PLATFORM OR LEVELING	total	101	1322.0	13.1
	med.mammal	135	602.0	4.5		med.mammal	63	325.5	5.2
	lg.mammal	56	1967.0	35.1		lg.mammal	36	920.5	25.6
	other	1	18.0	18.0		other	2	76.0	38.0
OCCUPATION & FILL IN	total	181	1464.5	8.1	MIXED OR OTHER	total	54	257.5	4.8
	med.mammal	145	622.5	4.3		med.mammal	37	60.0	1.6
	lg.mammal	32	835.5	26.1		lg.mammal	16	192.5	12.0
	other	4	6.5	1.6		other	1	5.0	5.0
OCCUPATION & FILL OUT & ASSOCIATED	total	1451	10292.5	7.1	TOTAL	total	5372	36106.5	6.7
	med.mammal	1089	3411.5	3.1		med.mammal	3970	11254.5	2.8
	lg.mammal	339	6410.5	18.9		lg.mammal	1316	23655.5	18.0
	other	23	470.5	20.5		other	86	1196.5	13.9

Table 7.34

Yahya VII

Context:		Count	Weight	Index	Context:		Count	Weight	Index
RUBBLE	total	16	333.0	20.8	MIDDEN	total	1290	4670.5	3.6
	med.mammal	62.5%	19.1%	6.4		med.mammal	79.3%	33.6%	1.5
	lg.mammal	37.5%	80.9%	44.9		lg.mammal	19.8%	63.2%	11.6
	other	0.0%	0.0%	0.0		other	0.9%	3.1%	12.2
WALLS	total	0	0.0	0.0	ROOM FILL IN & ASSOCIATED	total	569	4814.0	8.5
	med.mammal	0.0%	0.0%	0.0		med.mammal	63.1%	26.1%	3.5
	lg.mammal	0.0%	0.0%	0.0		lg.mammal	34.6%	72.3%	17.7
	other	0.0%	0.0%	0.0		other	2.3%	1.6%	6.0
OCCUPATION IN	total	597	2731.5	4.6	UNDIFFER-ENTIATED FILL OUT	total	921	7634.0	8.3
	med.mammal	81.1%	50.9%	2.9		med.mammal	67.9%	25.6%	3.1
	lg.mammal	16.9%	46.3%	12.5		lg.mammal	30.2%	70.2%	19.3
	other	2.0%	2.8%	6.5		other	2.0%	4.2%	17.8
OCCUPATION OUT & ASSOCIATED	total	192	2587.0	13.5	PLATFORM OR LEVELING	total	101	1322.0	13.1
	med.mammal	70.3%	23.3%	4.5		med.mammal	62.4%	24.6%	5.2
	lg.mammal	29.2%	76.0%	35.1		lg.mammal	35.6%	69.6%	25.6
	other	0.5%	0.7%	18.0		other	2.0%	5.7%	38.0
OCCUPATION & FILL IN	total	181	1464.5	8.1	MIXED OR OTHER	total	54	257.5	4.8
	med.mammal	80.1%	42.5%	4.3		med.mammal	68.5%	23.3%	1.6
	lg.mammal	17.7%	57.1%	26.1		lg.mammal	29.6%	74.8%	12.0
	other	2.2%	0.4%	1.6		other	1.9%	1.9%	5.0
OCCUPATION & FILL OUT & ASSOCIATED	total	1451	10292.5	7.1	TOTAL	total	5372	36106.5	6.7
	med.mammal	75.1%	33.1%	3.1		med.mammal	73.9%	31.2%	2.8
	lg.mammal	23.4%	62.3%	18.9		lg.mammal	24.5%	65.5%	18.0
	other	1.6%	4.6%	20.5		other	1.6%	3.3%	13.9

Table 7.35

Yahya VII

Context:		Count	Count	--%--	Context:		Count	Count	--%--
RUBBLE	0-0&C-%0/C	0	4	66.7%	MIDDEN	0-0&C-%0/C	7	88	74.6%
	C-Bos-%Bos	1	2	33.3%		C-Bos-%Bos	21	27	22.9%
	0/C-oth-%oth	3	0	0.0%		0/C-oth-%oth	60	3	2.5%
	Av/Rp-Tot-%0	0	6	0.0%		Av/Rp-Tot-%0	5	118	25.0%
WALLS	0-0&C-%0/C	0	0	--	ROOM FILL IN & ASSOCIATED	0-0&C-%0/C	14	86	68.8%
	C-Bos-%Bos	0	0	--		C-Bos-%Bos	17	37	29.6%
	0/C-oth-%oth	0	0	--		0/C-oth-%oth	55	2	1.6%
	Av/Rp-Tot-%0	0	0	--		Av/Rp-Tot-%0	18	125	45.2%
OCCUPATION IN	0-0&C-%0/C	6	84	77.8%	UNDIFFER-ENTIATED FILL OUT	0-0&C-%0/C	6	121	66.5%
	C-Bos-%Bos	13	20	18.5%		C-Bos-%Bos	32	50	27.5%
	0/C-oth-%oth	65	4	3.7%		0/C-oth-%oth	83	11	6.0%
	Av/Rp-Tot-%0	2	108	31.6%		Av/Rp-Tot-%0	5	182	15.8%
OCCUPATION OUT & ASSOCIATED	0-0&C-%0/C	7	57	72.2%	PLATFORM OR LEVELING	0-0&C-%0/C	5	18	64.3%
	C-Bos-%Bos	18	19	24.1%		C-Bos-%Bos	2	10	35.7%
	0/C-oth-%oth	32	3	3.8%		0/C-oth-%oth	11	0	0.0%
	Av/Rp-Tot-%0	3	79	28.0%		Av/Rp-Tot-%0	0	28	71.4%
OCCUPATION & FILL IN	0-0&C-%0/C	8	52	80.0%	MIXED OR OTHER	0-0&C-%0/C	2	12	80.0%
	C-Bos-%Bos	13	12	18.5%		C-Bos-%Bos	3	2	13.3%
	0/C-oth-%oth	31	1	1.5%		0/C-oth-%oth	7	1	6.7%
	Av/Rp-Tot-%0	2	65	38.1%		Av/Rp-Tot-%0	1	15	40.0%
OCCUPATION & FILL OUT & ASSOCIATED	0-0&C-%0/C	24	201	72.8%	TOTAL	0-0&C-%0/C	79	723	72.2%
	C-Bos-%Bos	65	69	25.0%		C-Bos-%Bos	185	248	24.8%
	0/C-oth-%oth	112	6	2.2%		0/C-oth-%oth	459	31	3.1%
	Av/Rp-Tot-%0	7	276	27.0%		Av/Rp-Tot-%0	43	1002	29.9%

Yahya VII

Context:		Count	Count	-%-	Context:		Count	Count	-%-
RUBBLE	tot-rodent-%	16	2	12.5%	MIDDEN	tot-rodent-%	1290	20	1.6%
	pol-carniv-%	0	0	0.0%		pol-carniv-%	1	2	0.2%
	tool-burned-%	0	0	0.0%		tool-burned-%	8	246	19.1%
	blows-cuts-%	0	0	0.0%		blows-cuts-%	0	0	0.0%
WALLS	tot-rodent-%	0	0	--	ROOM FILL IN & ASSOCIATED	tot-rodent-%	569	43	7.6%
	pol-carniv-%	0	0	--		pol-carniv-%	4	3	0.5%
	tool-burned-%	0	0	--		tool-burned-%	2	53	9.3%
	blows-cuts-%	0	0	--		blows-cuts-%	1	1	0.4%
OCCUPATION IN	tot-rodent-%	597	76	12.7%	UNDIFFER-ENTIATED FILL OUT	tot-rodent-%	921	39	4.2%
	pol-carniv-%	0	3	0.5%		pol-carniv-%	1	4	0.4%
	tool-burned-%	0	10	1.7%		tool-burned-%	4	11	1.2%
	blows-cuts-%	1	2	0.5%		blows-cuts-%	2	9	1.2%
OCCUPATION OUT & ASSOCIATED	tot-rodent-%	192	27	14.1%	PLATFORM OR LEVELING	tot-rodent-%	101	8	7.9%
	pol-carniv-%	0	3	1.6%		pol-carniv-%	0	0	0.0%
	tool-burned-%	0	4	2.1%		tool-burned-%	0	1	1.0%
	blows-cuts-%	1	1	1.0%		blows-cuts-%	0	1	1.0%
OCCUPATION & FILL IN	tot-rodent-%	181	31	17.1%	MIXED OR OTHER	tot-rodent-%	54	4	7.4%
	pol-carniv-%	0	0	0.0%		pol-carniv-%	0	0	0.0%
	tool-burned-%	0	5	2.8%		tool-burned-%	0	3	5.6%
	blows-cuts-%	0	0	0.0%		blows-cuts-%	0	0	0.0%
OCCUPATION & FILL OUT & ASSOCIATED	tot-rodent-%	1451	112	7.7%	TOTAL	tot-rodent-%	5372	362	6.7%
	pol-carniv-%	0	7	0.5%		pol-carniv-%	6	22	0.4%
	tool-burned-%	7	26	1.8%		tool-burned-%	21	359	6.7%
	blows-cuts-%	5	4	0.6%		blows-cuts-%	10	18	0.5%

Table 7.36

Table 7.37

Yahya VI

Context:		Count	Weight	Index	Context:		Count	Weight	Index
RUBBLE	total	1860	21299.5	11.5	MIDDEN	total	576	3716.0	6.5
	med.mammal	1050	3870.0	3.7		med.mammal	449	1588.0	3.5
	lg.mammal	775	14801.5	19.1		lg.mammal	122	2054.0	16.8
	other	35	2628.0	75.1		other	5	74.0	14.8
WALLS	total	32	365.0	11.4	ROOM FILL IN & ASSOCIATED	total	0	0.0	0.0
	med.mammal	20	62.0	3.1		med.mammal	0	0.0	0.0
	lg.mammal	12	303.0	25.3		lg.mammal	0	0.0	0.0
	other	0	0.0	0.0		other	0	0.0	0.0
OCCUPATION IN	total	23	1332.0	57.9	UNDIFFER-ENTIATED FILL OUT	total	259	3308.5	12.8
	med.mammal	9	18.0	2.0		med.mammal	167	705.5	4.2
	lg.mammal	13	1310.0	100.8		lg.mammal	89	2538.5	28.5
	other	1	4.0	4.0		other	3	64.5	21.5
OCCUPATION OUT & ASSOCIATED	total	0	0.0	0.0	PLATFORM OR LEVELING	total	77	897.5	11.7
	med.mammal			0.0		med.mammal	57	347.0	6.1
	lg.mammal			0.0		lg.mammal	20	538.0	26.9
	other			0.0		other	0	12.5	0.0
OCCUPATION & FILL IN	total	0	0.0	0.0	MIXED OR OTHER	total	174	1749.0	10.1
	med.mammal			0.0		med.mammal	88	336.0	3.8
	lg.mammal			0.0		lg.mammal	86	1358.0	15.8
	other			0.0		other	0	55.0	0.0
OCCUPATION & FILL OUT & ASSOCIATED	total	0	0.0	0.0	TOTAL	total	3001	32667.5	10.9
	med.mammal			0.0		med.mammal	1840	6926.5	3.8
	lg.mammal			0.0		lg.mammal	1117	22903.0	20.5
	other			0.0		other	44	2838.0	64.5

Yahya VI

Context:		Count	Weight	Index	Context:		Count	Weight	Index
RUBBLE	total	1860	21299.5	11.5	MIDDEN	total	576	3716.0	6.5
	med.mammal	56.5%	18.2%	3.7		med.mammal	78.0%	42.7%	3.5
	lg.mammal	41.7%	69.5%	19.1		lg.mammal	21.2%	55.3%	16.8
	other	1.9%	12.3%	75.1		other	0.9%	2.0%	14.8
WALLS	total	32	365.0	11.4	ROOM FILL IN & ASSOCIATED	total	0	0.0	0.0
	med.mammal	62.5%	17.0%	3.1		med.mammal	0.0%	0.0%	0.0
	lg.mammal	37.5%	83.0%	25.3		lg.mammal	0.0%	0.0%	0.0
	other	0.0%	0.0%	0.0		other	0.0%	0.0%	0.0
OCCUPATION IN	total	23	1332.0	57.9	UNDIFFER-ENTIATED FILL OUT	total	259	3308.5	12.8
	med.mammal	39.1%	1.4%	2.0		med.mammal	64.5%	21.3%	4.2
	lg.mammal	56.5%	98.3%	100.8		lg.mammal	34.4%	76.7%	28.5
	other	4.3%	0.3%	4.0		other	1.2%	1.9%	21.5
OCCUPATION OUT & ASSOCIATED	total	0	0.0	0.0	PLATFORM OR LEVELING	total	77	897.5	11.7
	med.mammal	0.0%	0.0%	0.0		med.mammal	74.0%	38.7%	6.1
	lg.mammal	0.0%	0.0%	0.0		lg.mammal	26.0%	59.9%	26.9
	other	0.0%	0.0%	0.0		other	0.0%	1.4%	0.0
OCCUPATION & FILL IN	total	0	0.0	0.0	MIXED OR OTHER	total	174	1749.0	10.1
	med.mammal	0.0%	0.0%	0.0		med.mammal	50.6%	19.2%	3.8
	lg.mammal	0.0%	0.0%	0.0		lg.mammal	49.4%	77.6%	15.8
	other	0.0%	0.0%	0.0		other	0.0%	3.1%	0.0
OCCUPATION & FILL OUT & ASSOCIATED	total	0	0.0	0.0	TOTAL	total	3001	32667.5	10.9
	med.mammal	0.0%	0.0%	0.0		med.mammal	61.3%	21.2%	3.8
	lg.mammal	0.0%	0.0%	0.0		lg.mammal	37.2%	70.1%	20.5
	other	0.0%	0.0%	0.0		other	1.5%	8.7%	64.5

Table 7.38

Yahya VI Context:		Count	Count	--%--	Context:		Count	Count	--%--
RUBBLE	O-O&C-%O/C	19	218	52.7%	MIDDEN	O-O&C-%O/C	24	138	80.2%
	C-Bos-%Bos	40	177	42.8%		C-Bos-%Bos	28	29	16.9%
	O/C-oth-%oth	159	19	4.6%		O/C-oth-%oth	86	5	2.9%
	Av/Rp-Tot-%O	6	414	32.2%		Av/Rp-Tot-%O	4	172	46.2%
WALLS	O-O&C-%O/C	0	3	33.3%	ROOM FILL IN & ASSOCIATED	O-O&C-%O/C	0	0	--
	C-Bos-%Bos	2	6	66.7%		C-Bos-%Bos	0	0	--
	O/C-oth-%oth	1	0	0.0%		O/C-oth-%oth	0	0	--
	Av/Rp-Tot-%O	0	9	0.0%		Av/Rp-Tot-%O	0	0	--
OCCUPATION IN	O-O&C-%O/C	1	2	16.7%	UNDIFFER-ENTIATED FILL OUT	O-O&C-%O/C	5	46	61.3%
	C-Bos-%Bos	0	9	75.0%		C-Bos-%Bos	16	27	36.0%
	O/C-oth-%oth	1	1	8.3%		O/C-oth-%oth	25	2	2.7%
	Av/Rp-Tot-%O	0	12	100.0%		Av/Rp-Tot-%O	2	75	23.8%
OCCUPATION OUT & ASSOCIATED	O-O&C-%O/C	0	0	--	PLATFORM OR LEVELING	O-O&C-%O/C	4	21	75.0%
	C-Bos-%Bos	0	0	--		C-Bos-%Bos	11	6	21.4%
	O/C-oth-%oth	0	0	--		O/C-oth-%oth	6	1	3.6%
	Av/Rp-Tot-%O	0	0	--		Av/Rp-Tot-%O	0	28	26.7%
OCCUPATION & FILL IN	O-O&C-%O/C	0	0	--	MIXED OR OTHER	O-O&C-%O/C	1	13	46.4%
	C-Bos-%Bos	0	0	--		C-Bos-%Bos	4	13	46.4%
	O/C-oth-%oth	0	0	--		O/C-oth-%oth	8	2	7.1%
	Av/Rp-Tot-%O	0	0	--		Av/Rp-Tot-%O	0	28	20.0%
OCCUPATION & FILL OUT & ASSOCIATED	O-O&C-%O/C	0	0	--	TOTAL	O-O&C-%O/C	54	441	59.8%
	C-Bos-%Bos	0	0	--		C-Bos-%Bos	101	267	36.2%
	O/C-oth-%oth	0	0	--		O/C-oth-%oth	286	30	4.1%
	Av/Rp-Tot-%O	0	0	--		Av/Rp-Tot-%O	12	738	34.8%

Table 7.39

Table 7.40

Yahya VI Context:		Count	Count	-%-	Context:		Count	Count	-%-
RUBBLE	tot-rodent-%r	1860	62	3.3%	MIDDEN	tot-rodent-%r	576	103	17.9%
	pol-carniv-%c	4	20	1.1%		pol-carniv-%c	1	1	0.2%
	tool-burn-%b	7	22	1.2%		tool-burn-%b	2	15	2.6%
	blow-cut-%b&c	3	16	1.0%		blow-cut-%b&c	0	1	0.2%
WALLS	tot-rodent-%r	32	4	12.5%	ROOM FILL IN & ASSOCIATED	tot-rodent-%r	0	0	--
	pol-carniv-%c	0	1	3.1%		pol-carniv-%c	0	0	--
	tool-burn-%b	0	1	3.1%		tool-burn-%b	0	0	--
	blow-cut-%b&c	0	0	0.0%		blow-cut-%b&c	0	0	--
OCCUPATION IN	tot-rodent-%r	23	0	0.0%	UNDIFFER-ENTIATED FILL OUT	tot-rodent-%r	259	21	8.1%
	pol-carniv-%c	0	0	0.0%		pol-carniv-%c	2	0	0.0%
	tool-burn-%b	5	0	0.0%		tool-burn-%b	1	4	1.5%
	blow-cut-%b&c	0	0	0.0%		blow-cut-%b&c	0	5	1.9%
OCCUPATION OUT & ASSOCIATED	tot-rodent-%r	0	0	--	PLATFORM OR LEVELING	tot-rodent-%r	77	6	7.8%
	pol-carniv-%c	0	0	--		pol-carniv-%c	1	0	0.0%
	tool-burn-%b	0	0	--		tool-burn-%b	0	2	2.6%
	blow-cut-%b&c	0	0	--		blow-cut-%b&c	0	2	2.6%
OCCUPATION & FILL IN	tot-rodent-%r	0	0	--	MIXED OR OTHER	tot-rodent-%r	174	6	3.4%
	pol-carniv-%c	0	0	--		pol-carniv-%c	0	3	1.7%
	tool-burn-%b	0	0	--		tool-burn-%b	0	3	1.7%
	blow-cut-%b&c	0	0	--		blow-cut-%b&c	0	5	2.9%
OCCUPATION & FILL OUT & ASSOCIATED	tot-rodent-%r	0	0	--	TOTAL	tot-rodent-%r	3001	202	6.7%
	pol-carniv-%c	0	0	--		pol-carniv-%c	8	25	0.8%
	tool-burn-%b	0	0	--		tool-burn-%b	15	47	1.6%
	blow-cut-%b&c	0	0	--		blow-cut-%b&c	3	29	1.1%

Table 7.41

Yahya V

Context:		Count	Weight	Index	Context:		Count	Weight	Index
RUBBLE	total	64	586.0	9.2	MIDDEN	total	75	820.0	10.9
	med.mammal	45	170.0	3.8		med.mammal	39	183.0	4.7
	lg.mammal	18	389.5	21.6		lg.mammal	32	561.5	17.5
	other	1	26.5	26.5		other	4	75.5	18.9
WALLS	total	32	139.5	4.4	ROOM FILL IN & ASSOCIATED	total	16	99.0	6.2
	med.mammal	21	69.5	3.3		med.mammal	8	21.5	2.7
	lg.mammal	10	69.5	7.0		lg.mammal	8	77.5	9.7
	other	1	0.5	0.5		other	0	0.0	0.0
OCCUPATION IN	total	0	0.0	0.0	UNDIFFER-ENTIATED FILL OUT	total	232	1457.5	6.3
	med.mammal	0	0.0	0.0		med.mammal	168	441.5	2.6
	lg.mammal	0	0.0	0.0		lg.mammal	62	995.5	16.1
	other	0	0.0	0.0		other	2	20.5	10.3
OCCUPATION OUT & ASSOCIATED	total	762	4083.0	5.4	PLATFORM OR LEVELING	total	93	573.0	6.2
	med.mammal	525	1687.0	3.2		med.mammal	69	272.0	3.9
	lg.mammal	222	2251.5	10.1		lg.mammal	24	246.0	10.3
	other	15	144.5	9.6		other	0	55.0	0.0
OCCUPATION & FILL IN	total	134	996.0	7.4	MIXED OR OTHER	total	232	3063.5	13.2
	med.mammal	88	286.5	3.3		med.mammal	154	493.0	3.2
	lg.mammal	31	640.5	20.7		lg.mammal	64	2521.5	39.4
	other	15	69.0	4.6		other	14	49.0	3.5
OCCUPATION & FILL OUT & ASSOCIATED	total	239	1426.0	6.0	TOTAL	total	1879	13243.5	7.0
	med.mammal	173	862.5	5.0		med.mammal	1290	4486.5	3.5
	lg.mammal	56	545.0	9.7		lg.mammal	527	8298.0	15.7
	other	10	18.5	1.9		other	62	459.0	7.4

Table 7.42

Yahya V

Context:		Count	Weight	Index	Context:		Count	Weight	Index
RUBBLE	total	64	586.0	9.2	MIDDEN	total	75	820.0	10.9
	med.mammal	70.3%	29.0%	3.8		med.mammal	52.0%	22.3%	4.7
	lg.mammal	28.1%	66.5%	21.6		lg.mammal	42.7%	68.5%	17.5
	other	1.6%	4.5%	26.5		other	5.3%	9.2%	18.9
WALLS	total	32	139.5	4.4	ROOM FILL IN & ASSOCIATED	total	16	99.0	6.2
	med.mammal	65.6%	49.8%	3.3		med.mammal	50.0%	21.7%	2.7
	lg.mammal	31.3%	49.8%	7.0		lg.mammal	50.0%	78.3%	9.7
	other	3.1%	0.4%	0.5		other	0.0%	0.0%	0.0
OCCUPATION IN	total	0	0.0	0.0	UNDIFFER-ENTIATED FILL OUT	total	232	1457.5	6.3
	med.mammal	0.0%	0.0%	0.0		med.mammal	72.4%	30.3%	2.6
	lg.mammal	0.0%	0.0%	0.0		lg.mammal	26.7%	68.6%	16.1
	other	0.0%	0.0%	0.0		other	0.9%	1.4%	10.3
OCCUPATION OUT & ASSOCIATED	total	762	4083.0	5.4	PLATFORM OR LEVELING	total	93	573.0	6.2
	med.mammal	68.9%	41.3%	3.2		med.mammal	74.2%	47.5%	3.9
	lg.mammal	29.1%	55.1%	10.1		lg.mammal	25.8%	42.9%	10.3
	other	2.0%	3.5%	9.6		other	0.0%	9.6%	0.0
OCCUPATION & FILL IN	total	134	996.0	7.4	MIXED OR OTHER	total	232	3063.5	13.2
	med.mammal	65.7%	28.8%	3.3		med.mammal	66.4%	16.1%	3.2
	lg.mammal	23.1%	64.3%	20.7		lg.mammal	27.6%	82.3%	39.4
	other	11.2%	6.9%	4.6		other	6.0%	1.6%	3.5
OCCUPATION & FILL OUT & ASSOCIATED	total	239	1426.0	6.0	TOTAL	total	1879	13243.5	7.0
	med.mammal	72.4%	60.5%	5.0		med.mammal	68.7%	33.9%	3.5
	lg.mammal	23.4%	38.2%	9.7		lg.mammal	28.0%	62.7%	15.7
	other	4.2%	1.3%	1.9		other	3.3%	3.5%	7.4

Table 7.43

Yayha V Context:		Count	Count	--%--	Context:		Count	Count	--%--
RUBBLE	0-0&C-%0/C	2	13	72.2%	MIDDEN	0-0&C-%0/C	1	11	52.4%
	C-Bos-%Bos	4	3	16.7%		C-Bos-%Bos	1	9	42.9%
	0/C-oth-%oth	7	2	11.1%		0/C-oth-%oth	9	1	4.8%
	Av/Rp-Tot-%0	0	18	33.3%		Av/Rp-Tot-%0	0	21	50.0%
WALLS	0-0&C-%0/C	1	7	77.8%	ROOM FILL	0-0&C-%0/C	1	2	100.0%
	C-Bos-%Bos	3	2	22.2%	IN &	C-Bos-%Bos	0	0	0.0%
	0/C-oth-%oth	3	0	0.0%	ASSOCIATED	0/C-oth-%oth	1	0	0.0%
	Av/Rp-Tot-%0	0	9	25.0%		Av/Rp-Tot-%0	0	2	100.0%
OCCUPATION	0-0&C-%0/C	0	0	--	UNDIFFER-	0-0&C-%0/C	5	32	82.1%
IN	C-Bos-%Bos	0	0	--	ENTIATED	C-Bos-%Bos	9	7	17.9%
	0/C-oth-%oth	0	0	--	FILL	0/C-oth-%oth	18	0	0.0%
	Av/Rp-Tot-%0	0	0	--	OUT	Av/Rp-Tot-%0	1	39	35.7%
OCCUPATION	0-0&C-%0/C	25	135	81.8%	PLATFORM	0-0&C-%0/C	3	19	79.2%
OUT &	C-Bos-%Bos	41	26	15.8%	OR	C-Bos-%Bos	7	2	8.3%
ASSOCIATED	0/C-oth-%oth	69	4	2.4%	LEVELING	0/C-oth-%oth	9	3	12.5%
	Av/Rp-Tot-%0	1	165	37.9%		Av/Rp-Tot-%0	1	24	30.0%
OCCUPATION	0-0&C-%0/C	6	25	51.0%	MIXED OR	0-0&C-%0/C	2	44	73.3%
& FILL	C-Bos-%Bos	8	12	24.5%	OTHER	C-Bos-%Bos	15	13	21.7%
IN	0/C-oth-%oth	11	12	24.5%		0/C-oth-%oth	27	3	5.0%
	Av/Rp-Tot-%0	0	49	42.9%		Av/Rp-Tot-%0	1	60	11.8%
OCCUPATION	0-0&C-%0/C	10	54	85.7%	TOTAL	0-0&C-%0/C	56	342	76.0%
& FILL	C-Bos-%Bos	14	7	11.1%		C-Bos-%Bos	102	81	18.0%
OUT &	0/C-oth-%oth	30	2	3.2%		0/C-oth-%oth	184	27	6.0%
ASSOCIATED	Av/Rp-Tot-%0	1	63	41.7%		Av/Rp-Tot-%0	5	450	35.4%

Table 7.44

Yahya V

Context:		Count	Count	-%-
RUBBLE	tot-rodent-%r	64	6	9.4%
	pol-carniv-%c	0	0	0.0%
	tool-burn-%b	1	3	4.7%
	blow-cut-%b&c	1	0	1.6%
WALLS	tot-rodent-%r	32	4	12.5%
	pol-carniv-%c	0	0	0.0%
	tool-burn-%b	0	0	0.0%
	blow-cut-%b&c	0	1	3.1%
OCCUPATION IN	tot-rodent-%r	0	0	--
	pol-carniv-%c	0	0	--
	tool-burn-%b	0	0	--
	blow-cut-%b&c	0	0	--
OCCUPATION OUT & ASSOCIATED	tot-rodent-%r	762	74	9.7%
	pol-carniv-%c	0	7	0.9%
	tool-burn-%b	3	9	1.2%
	blow-cut-%b&c	3	13	2.1%
OCCUPATION & FILL IN	tot-rodent-%r	134	29	21.6%
	pol-carniv-%c	0	1	0.7%
	tool-burn-%b	0	3	2.2%
	blow-cut-%b&c	0	1	0.7%
OCCUPATION & FILL OUT & ASSOCIATED	tot-rodent-%r	239	39	16.3%
	pol-carniv-%c	0	1	0.4%
	tool-burn-%b	0	4	1.7%
	blow-cut-%b&c	0	7	2.9%
MIDDEN	tot-rodent-%r	75	6	8.0%
	pol-carniv-%c	1	1	1.3%
	tool-burn-%b	0	1	1.3%
	blow-cut-%b&c	0	3	4.0%
ROOM FILL IN & ASSOCIATED	tot-rodent-%r	16	0	0.0%
	pol-carniv-%c	0	0	0.0%
	tool-burn-%b	0	0	0.0%
	blow-cut-%b&c	0	0	0.0%
UNDIFFER-ENTIATED FILL OUT	tot-rodent-%r	232	14	6.0%
	pol-carniv-%c	0	2	0.9%
	tool-burn-%b	0	7	3.0%
	blow-cut-%b&c	0	4	1.7%
PLATFORM OR LEVELING	tot-rodent-%r	93	13	14.0%
	pol-carniv-%c	0	0	0.0%
	tool-burn-%b	0	3	3.2%
	blow-cut-%b&c	0	1	1.1%
MIXED OR OTHER	tot-rodent-%r	232	23	9.9%
	pol-carniv-%c	9	0	0.0%
	tool-burn-%b	1	47	20.3%
	blow-cut-%b&c	0	0	0.0%
TOTAL	tot-rodent-%r	1879	208	11.1%
	pol-carniv-%c	10	12	0.6%
	tool-burn-%b	5	77	4.1%
	blow-cut-%b&c	4	30	1.8%

Yahya IV C Total Not Screened

Context:		Count	Weight	Index	Context:		Count	Weight	Index
RUBBLE	total	0	0.0	0.0	MIDDEN	total	0	0.0	0.0
	med.mammal	0	0.0	0.0		med.mammal	0	0.0	0.0
	lg.mammal	0	0.0	0.0		lg.mammal	0	0.0	0.0
	other	0	0.0	0.0		other	0	0.0	0.0
WALLS	total	109	995.0	9.1	ROOM FILL	total	354	2247.5	6.3
	med.mammal	93	337.0	3.6	IN &	med.mammal	331	1486.0	4.5
	lg.mammal	13	648.0	49.8	ASSOCIATED	lg.mammal	21	750.0	35.7
	other	3	10.0	3.3		other	2	11.5	5.8
OCCUPATION	total	279	1718.5	6.2	UNDIFFER-	total	9	35.5	3.9
IN	med.mammal	238	1056.0	4.4	ENTIATED	med.mammal	9	35.5	3.9
	lg.mammal	36	659.5	18.3	FILL	lg.mammal	0	0.0	0.0
	other	5	3.0	0.6	OUT	other	0	0.0	0.0
OCCUPATION	total	308	1965.0	6.4	PLATFORM	total	39	277.0	7.1
OUT &	med.mammal	273	1439.0	5.3	OR	med.mammal	33	248.5	7.5
ASSOCIATED	lg.mammal	33	521.0	15.8	LEVELING	lg.mammal	5	25.5	5.1
	other	2	5.0	2.5		other	1	3.0	3.0
OCCUPATION	total	339	3323.5	9.8	MIXED OR	total	54	298.5	5.5
& FILL	med.mammal	307	1585.5	5.2	OTHER	med.mammal	50	172.5	3.5
IN	lg.mammal	30	1733.0	57.8		lg.mammal	4	126.0	31.5
	other	2	5.0	2.5		other	0	0.0	0.0
OCCUPATION	total	593	4729.0	8.0	TOTAL	total	2084	15589.5	7.5
& FILL	med.mammal	513	2623.5	5.1		med.mammal	1847	8983.5	4.9
OUT &	lg.mammal	74	2071.0	28.0		lg.mammal	216	6534.0	30.3
ASSOCIATED	other	6	34.5	5.8		other	21	72.0	3.4

Table 7.45

Table 7.46

Yahya IV C Total Not Screened

Context:		Count	Weight	Index	Context:		Count	Weight	Index
RUBBLE	total	0	0.0	0.0	MIDDEN	total	0	0.0	0.0
	med.mammal	0.0%	0.0%	0.0		med.mammal	0.0%	0.0%	0.0
	lg.mammal	0.0%	0.0%	0.0		lg.mammal	0.0%	0.0%	0.0
	other	0.0%	0.0%	0.0		other	0.0%	0.0%	0.0
WALLS	total	109	995.0	9.1	ROOM FILL	total	354	2247.5	6.3
	med.mammal	85.3%	33.9%	3.6	IN &	med.mammal	93.5%	66.1%	4.5
	lg.mammal	11.9%	65.1%	49.8	ASSOCIATED	lg.mammal	5.9%	33.4%	35.7
	other	2.8%	1.0%	3.3		other	0.6%	0.5%	5.8
OCCUPATION	total	279	1718.5	6.2	UNDIFFER-	total	9	35.5	3.9
IN	med.mammal	85.3%	61.4%	4.4	ENTIATED	med.mammal	100.0%	100.0%	3.9
	lg.mammal	12.9%	38.4%	18.3	FILL	lg.mammal	0.0%	0.0%	0.0
	other	1.8%	0.2%	0.6	OUT	other	0.0%	0.0%	0.0
OCCUPATION	total	308	1965.0	6.4	PLATFORM	total	39	277.0	7.1
OUT &	med.mammal	88.6%	73.2%	5.3	OR	med.mammal	84.6%	89.7%	7.5
ASSOCIATED	lg.mammal	10.7%	26.5%	15.8	LEVELING	lg.mammal	12.8%	9.2%	5.1
	other	0.6%	0.3%	2.5		other	2.6%	1.1%	3.0
OCCUPATION	total	339	3323.5	9.8	MIXED OR	total	54	298.5	5.5
& FILL	med.mammal	90.6%	47.7%	5.2	OTHER	med.mammal	92.6%	57.8%	3.5
IN	lg.mammal	8.8%	52.1%	57.8		lg.mammal	7.4%	42.2%	31.5
	other	0.6%	0.2%	2.5		other	0.0%	0.0%	0.0
OCCUPATION	total	593	4729.0	8.0	TOTAL	total	2084	15589.5	7.5
& FILL	med.mammal	86.5%	55.5%	5.1		med.mammal	88.6%	57.6%	4.9
OUT &	lg.mammal	12.5%	43.8%	28.0		lg.mammal	10.4%	41.9%	30.3
ASSOCIATED	other	1.0%	0.7%	5.8		other	1.0%	0.5%	3.4

Table 7.47

Yahya IV C Total Not Screened

Context:					Context:				
RUBBLE	O-O&C-%O/C	0	0	--	MIDDEN	O-O&C-%O/C	0	0	--
	C-Bos-%Bos	0	0	--		C-Bos-%Bos	0	0	--
	O/C-oth-%oth	0	0	--		O/C-oth-%oth	0	0	--
	Av/Rp-Tot-%O	0	0	--		Av/Rp-Tot-%O	0	0	--
WALLS	O-O&C-%O/C	2	24	82.8%	ROOM FILL IN & ASSOCIATED	O-O&C-%O/C	14	108	92.3%
	C-Bos-%Bos	13	5	17.2%		C-Bos-%Bos	45	8	6.8%
	O/C-oth-%oth	9	0	0.0%		O/C-oth-%oth	49	1	0.9%
	Av/Rp-Tot-%O	0	29	13.3%		Av/Rp-Tot-%O	7	117	23.7%
OCCUPATION IN	O-O&C-%O/C	10	66	90.4%	UNDIFFER-ENTIATED FILL OUT	O-O&C-%O/C	1	3	100.0%
	C-Bos-%Bos	37	7	9.6%		C-Bos-%Bos	0	0	0.0%
	O/C-oth-%oth	19	0	0.0%		O/C-oth-%oth	2	0	0.0%
	Av/Rp-Tot-%O	2	73	21.3%		Av/Rp-Tot-%O	0	3	100.0%
OCCUPATION OUT & ASSOCIATED	O-O&C-%O/C	12	99	95.2%	PLATFORM OR LEVELING	O-O&C-%O/C	2	17	94.4%
	C-Bos-%Bos	43	4	3.8%		C-Bos-%Bos	9	0	0.0%
	O/C-oth-%oth	44	1	1.0%		O/C-oth-%oth	6	1	5.6%
	Av/Rp-Tot-%O	2	104	21.8%		Av/Rp-Tot-%O	0	18	18.2%
OCCUPATION & FILL IN	O-O&C-%O/C	12	102	89.5%	MIXED OR OTHER	O-O&C-%O/C	1	10	83.3%
	C-Bos-%Bos	47	10	8.8%		C-Bos-%Bos	6	2	16.7%
	O/C-oth-%oth	43	2	1.8%		O/C-oth-%oth	3	0	0.0%
	Av/Rp-Tot-%O	0	114	20.3%		Av/Rp-Tot-%O	0	12	14.3%
OCCUPATION & FILL OUT & ASSOCIATED	O-O&C-%O/C	41	183	86.3%	TOTAL	O-O&C-%O/C	95	612	89.7%
	C-Bos-%Bos	60	20	9.4%		C-Bos-%Bos	260	56	8.2%
	O/C-oth-%oth	82	9	4.2%		O/C-oth-%oth	257	14	2.1%
	Av/Rp-Tot-%O	4	212	40.6%		Av/Rp-Tot-%O	15	682	26.8%

Yahya IV C Not Screened Total

Context:		Count	Count	-%-	Context:		Count	Count	-%-
RUBBLE	tot-rodent-%r	0	0	--	MIDDEN	tot-rodent-%r	0	0	--
	pol-carniv-%c	0	0	--		pol-carniv-%c	0	0	--
	tool-burn-%b	0	0	--		tool-burn-%b	0	0	--
	blow-cut-%b&c	0	0	--		blow-cut-%b&c	0	0	--
WALLS	tot-rodent-%r	109	17	15.6%	ROOM FILL	tot-rodent-%r	354	47	13.3%
	pol-carniv-%c	1	3	2.8%	IN &	pol-carniv-%c	0	5	1.4%
	tool-burn-%b	1	0	0.0%	ASSOCIATED	tool-burn-%b	0	4	1.1%
	blow-cut-%b&c	0	5	4.6%		blow-cut-%b&c	0	18	5.1%
OCCUPATION	tot-rodent-%r	279	27	9.7%	UNDIFFER-	tot-rodent-%r	9	1	11.1%
IN	pol-carniv-%c	0	1	0.4%	ENTIATED	pol-carniv-%c	0	1	11.1%
	tool-burn-%b	1	1	0.4%	FILL	tool-burn-%b	0	0	0.0%
	blow-cut-%b&c	0	17	6.1%	OUT	blow-cut-%b&c	0	0	0.0%
OCCUPATION	tot-rodent-%r	308	59	19.2%	PLATFORM	tot-rodent-%r	39	8	20.5%
OUT &	pol-carniv-%c	0	5	1.6%	OR	pol-carniv-%c	0	1	2.6%
ASSOCIATED	tool-burn-%b	1	1	0.3%	LEVELING	tool-burn-%b	0	0	0.0%
	blow-cut-%b&c	0	13	4.2%		blow-cut-%b&c	0	1	2.6%
OCCUPATION	tot-rodent-%r	339	47	13.9%	MIXED OR	tot-rodent-%r	54	4	7.4%
& FILL	pol-carniv-%c	0	6	1.8%	OTHER	pol-carniv-%c	0	3	5.6%
IN	tool-burn-%b	0	1	0.3%		tool-burn-%b	0	0	0.0%
	blow-cut-%b&c	0	22	6.5%		blow-cut-%b&c	0	5	9.3%
OCCUPATION	tot-rodent-%r	593	80	13.5%	TOTAL	tot-rodent-%r	2084	290	13.9%
& FILL	pol-carniv-%c	1	5	0.8%		pol-carniv-%c	2	30	1.4%
OUT &	tool-burn-%b	0	9	1.5%		tool-burn-%b	3	16	0.8%
ASSOCIATED	blow-cut-%b&c	0	30	5.1%		blow-cut-%b&c	0	111	5.3%

Table 7.48

Table 7.49

Yahya IV C Total Screened

Context:		Count	Weight	Index	Context:		Count	Weight	Index
RUBBLE	total	0	0.0	0.0	MIDDEN	total	0	0.0	0.0
	med.mammal	0	0.0	0.0		med.mammal	0	0.0	0.0
	lg.mammal	0	0.0	0.0		lg.mammal	0	0.0	0.0
	other	0	0.0	0.0		other	0	0.0	0.0
WALLS	total	0	0.0	0.0	ROOM FILL	total	612	1072.0	1.8
	med.mammal	0	0.0	0.0	IN &	med.mammal	577	907.0	1.6
	lg.mammal	0	0.0	0.0	ASSOCIATED	lg.mammal	27	118.0	4.4
	other	0	0.0	0.0		other	8	47.0	5.9
OCCUPATION	total	49	49.5	1.0	UNDIFFER-	total	0	0.0	0.0
IN	med.mammal	42	40.5	1.0	ENTIATED	med.mammal	0	0.0	0.0
	lg.mammal	6	8.5	1.4	FILL	lg.mammal	0	0.0	0.0
	other	1	0.5	0.5	OUT	other	0	0.0	0.0
OCCUPATION	total	325	453.0	1.4	PLATFORM	total	0	0.0	0.0
OUT &	med.mammal	311	407.5	1.3	OR	med.mammal	0	0.0	0.0
ASSOCIATED	lg.mammal	12	42.0	3.5	LEVELING	lg.mammal	0	0.0	0.0
	other	2	3.5	1.8		other	0	0.0	0.0
OCCUPATION	total	410	444.0	1.1	MIXED OR	total	0	0.0	0.0
& FILL	med.mammal	382	364.0	1.0	OTHER	med.mammal	0	0.0	0.0
IN	lg.mammal	27	79.5	2.9		lg.mammal	0	0.0	0.0
	other	1	0.5	0.5		other	0	0.0	0.0
OCCUPATION	total	1514	1975.0	1.3	TOTAL	total	2910	3993.5	1.4
& FILL	med.mammal	1392	1663.5	1.2		med.mammal	2704	3382.5	1.3
OUT &	lg.mammal	70	280.5	4.0		lg.mammal	142	528.5	3.7
ASSOCIATED	other	52	31.0	0.6		other	64	82.5	1.3

Table 7.50

Yahya IV C Total Screened

Context:		Count	Weight	Index	Context:		Count	Weight	Index
RUBBLE	total	0	0.0	0.0	MIDDEN	total	0	0.0	0.0
	med.mammal	0.0%	0.0%	0.0		med.mammal	0.0%	0.0%	0.0
	lg.mammal	0.0%	0.0%	0.0		lg.mammal	0.0%	0.0%	0.0
	other	0.0%	0.0%	0.0		other	0.0%	0.0%	0.0
WALLS	total	0	0.0	0.0	ROOM FILL IN & ASSOCIATED	total	612	1072.0	1.8
	med.mammal	0.0%	0.0%	0.0		med.mammal	94.3%	84.6%	1.6
	lg.mammal	0.0%	0.0%	0.0		lg.mammal	4.4%	11.0%	4.4
	other	0.0%	0.0%	0.0		other	1.3%	4.4%	5.9
OCCUPATION IN	total	49	49.5	1.0	UNDIFFER-ENTIATED FILL OUT	total	0	0.0	0.0
	med.mammal	85.7%	81.8%	1.0		med.mammal	0.0%	0.0%	0.0
	lg.mammal	12.2%	17.2%	1.4		lg.mammal	0.0%	0.0%	0.0
	other	2.0%	1.0%	0.5		other	0.0%	0.0%	0.0
OCCUPATION OUT & ASSOCIATED	total	325	453.0	1.4	PLATFORM OR LEVELING	total	0	0.0	0.0
	med.mammal	95.7%	90.0%	1.3		med.mammal	0.0%	0.0%	0.0
	lg.mammal	3.7%	9.3%	3.5		lg.mammal	0.0%	0.0%	0.0
	other	0.6%	0.8%	1.8		other	0.0%	0.0%	0.0
OCCUPATION & FILL IN	total	410	444.0	1.1	MIXED OR OTHER	total	0	0.0	0.0
	med.mammal	93.2%	82.0%	1.0		med.mammal	0.0%	0.0%	0.0
	lg.mammal	6.6%	17.9%	2.9		lg.mammal	0.0%	0.0%	0.0
	other	0.2%	0.1%	0.5		other	0.0%	0.0%	0.0
OCCUPATION & FILL OUT & ASSOCIATED	total	1514	1975.0	1.3	TOTAL	total	2910	3993.5	1.4
	med.mammal	91.9%	84.2%	1.2		med.mammal	92.9%	84.7%	1.3
	lg.mammal	4.6%	14.2%	4.0		lg.mammal	4.9%	13.2%	3.7
	other	3.4%	1.6%	0.6		other	2.2%	2.1%	1.3

Yahya IV C Screened Total

Context:		Count	Count	-%-	Context:		Count	Count	-%-
RUBBLE	tot-rodent-%r	0	0	--	MIDDEN	tot-rodent-%r	0	0	--
	pol-carniv-%c	0	0	--		pol-carniv-%c	0	0	--
	tool-burn-%b	0	0	--		tool-burn-%b	0	0	--
	blow-cut-%b&c	0	0	--		blow-cut-%b&c	0	0	--
WALLS	tot-rodent-%r	0	0	--	ROOM FILL IN & ASSOCIATED	tot-rodent-%r	612	24	3.9%
	pol-carniv-%c	0	0	--		pol-carniv-%c	0	1	0.2%
	tool-burn-%b	0	0	--		tool-burn-%b	1	2	0.3%
	blow-cut-%b&c	0	0	--		blow-cut-%b&c	0	6	1.0%
OCCUPATION IN	tot-rodent-%r	49	2	4.1%	UNDIFFER-ENTIATED FILL OUT	tot-rodent-%r	0	0	--
	pol-carniv-%c	0	0	0.0%		pol-carniv-%c	0	0	--
	tool-burn-%b	0	0	0.0%		tool-burn-%b	0	0	--
	blow-cut-%b&c	0	1	2.0%		blow-cut-%b&c	0	0	--
OCCUPATION OUT & ASSOCIATED	tot-rodent-%r	325	22	6.8%	PLATFORM OR LEVELING	tot-rodent-%r	0	0	--
	pol-carniv-%c	1	1	0.3%		pol-carniv-%c	0	0	--
	tool-burn-%b	0	3	0.9%		tool-burn-%b	0	0	--
	blow-cut-%b&c	0	7	2.2%		blow-cut-%b&c	0	0	--
OCCUPATION & FILL IN	tot-rodent-%r	410	30	7.3%	MIXED OR OTHER	tot-rodent-%r	0	0	--
	pol-carniv-%c	0	0	0.0%		pol-carniv-%c	0	0	--
	tool-burn-%b	0	3	0.7%		tool-burn-%b	0	0	--
	blow-cut-%b&c	0	4	1.0%		blow-cut-%b&c	0	0	--
OCCUPATION & FILL OUT & ASSOCIATED	tot-rodent-%r	1514	62	4.1%	TOTAL	tot-rodent-%r	2910	140	4.8%
	pol-carniv-%c	0	1	0.1%		pol-carniv-%c	1	3	0.1%
	tool-burn-%b	2	102	6.7%		tool-burn-%b	3	110	3.8%
	blow-cut-%b&c	0	14	0.9%		blow-cut-%b&c	0	32	1.1%

Table 7.51

Yahya IV C Total Screened

Context:				
RUBBLE	0-0&C-%O/C	0	0	--
	C-Bos-%Bos	0	0	--
	O/C-oth-%oth	0	0	--
	Av/Rp-Tot-%O	0	0	--
WALLS	0-0&C-%O/C	0	0	--
	C-Bos-%Bos	0	0	--
	O/C-oth-%oth	0	0	--
	Av/Rp-Tot-%O	0	0	--
OCCUPATION IN	0-0&C-%O/C	2	5	100.0%
	C-Bos-%Bos	0	0	0.0%
	O/C-oth-%oth	3	0	0.0%
	Av/Rp-Tot-%O	0	5	100.0%
OCCUPATION OUT & ASSOCIATED	0-0&C-%O/C	8	45	90.0%
	C-Bos-%Bos	14	2	4.0%
	O/C-oth-%oth	23	3	6.0%
	Av/Rp-Tot-%O	0	50	36.4%
OCCUPATION & FILL IN	0-0&C-%O/C	6	37	94.9%
	C-Bos-%Bos	14	1	2.6%
	O/C-oth-%oth	17	1	2.6%
	Av/Rp-Tot-%O	5	39	30.0%
OCCUPATION & FILL OUT & ASSOCIATED	0-0&C-%O/C	15	166	91.7%
	C-Bos-%Bos	39	2	1.1%
	O/C-oth-%oth	112	13	7.2%
	Av/Rp-Tot-%O	7	181	27.8%

Context:				
MIDDEN	0-0&C-%O/C	0	0	--
	C-Bos-%Bos	0	0	--
	O/C-oth-%oth	0	0	--
	Av/Rp-Tot-%O	0	0	--
ROOM FILL IN & ASSOCIATED	0-0&C-%O/C	4	85	98.8%
	C-Bos-%Bos	19	0	0.0%
	O/C-oth-%oth	62	1	1.2%
	Av/Rp-Tot-%O	6	86	17.4%
UNDIFFER-ENTIATED FILL OUT	0-0&C-%O/C	0	0	--
	C-Bos-%Bos	0	0	--
	O/C-oth-%oth	0	0	--
	Av/Rp-Tot-%O	0	0	--
PLATFORM OR LEVELING	0-0&C-%O/C	0	0	--
	C-Bos-%Bos	0	0	--
	O/C-oth-%oth	0	0	--
	Av/Rp-Tot-%O	0	0	--
MIXED OR OTHER	0-0&C-%O/C	0	0	--
	C-Bos-%Bos	0	0	--
	O/C-oth-%oth	0	0	--
	Av/Rp-Tot-%O	0	0	--
TOTAL	0-0&C-%O/C	35	338	93.6%
	C-Bos-%Bos	86	5	1.4%
	O/C-oth-%oth	217	18	5.0%
	Av/Rp-Tot-%O	18	361	28.9%

Table 7.52

Table 7.53

Yahya IVC Total

Context:		Count	Weight	Index	Context:		Count	Weight	Index
RUBBLE	total	0	0.0	0.0	MIDDEN	total	0	0.0	0.0
	med.mammal	0	0.0	0.0		med.mammal	0	0.0	0.0
	lg.mammal	0	0.0	0.0		lg.mammal	0	0.0	0.0
	other	0	0.0	0.0		other	0	0.0	0.0
WALLS	total	109	995.0	9.1	ROOM FILL IN & ASSOCIATED	total	966	3319.5	3.4
	med.mammal	93	337.0	3.6		med.mammal	908	2393.0	2.6
	lg.mammal	13	648.0	49.8		lg.mammal	48	868.0	18.1
	other	3	10.0	3.3		other	10	58.5	5.9
OCCUPATION IN	total	328	1768.0	5.4	UNDIFFER-ENTIATED FILL OUT	total	9	35.5	3.9
	med.mammal	280	1096.5	3.9		med.mammal	9	35.5	3.9
	lg.mammal	42	668.0	15.9		lg.mammal	0	0.0	0.0
	other	6	3.5	0.6		other	0	0.0	0.0
OCCUPATION OUT & ASSOCIATED	total	633	2418.0	3.8	PLATFORM OR LEVELING	total	39	277.0	7.1
	med.mammal	584	1846.5	3.2		med.mammal	33	248.5	7.5
	lg.mammal	45	563.0	12.5		lg.mammal	5	25.5	5.1
	other	4	8.5	2.1		other	1	3.0	3.0
OCCUPATION & FILL IN	total	749	3767.5	5.0	MIXED OR OTHER	total	54	298.5	5.5
	med.mammal	689	1949.5	2.8		med.mammal	50	172.5	3.5
	lg.mammal	57	1812.5	31.8		lg.mammal	4	126.0	31.5
	other	3	5.5	1.8		other	0	0.0	0.0
OCCUPATION & FILL OUT & ASSOCIATED	total	2107	6704.0	3.2	TOTAL	total	4994	19583.0	3.9
	med.mammal	1905	4287.0	2.3		med.mammal	4551	12366.0	2.7
	lg.mammal	144	2351.5	16.3		lg.mammal	358	7062.5	19.7
	other	58	65.5	1.1		other	85	154.5	1.8

Yahya IVC Total

Context:		Count	Weight	Index	Context:		Count	Weight	Index
RUBBLE	total	0	0.0	0.0	MIDDEN	total	0	0.0	0.0
	med.mammal	0.0%	0.0%	0.0		med.mammal	0.0%	0.0%	0.0
	lg.mammal	0.0%	0.0%	0.0		lg.mammal	0.0%	0.0%	0.0
	other	0.0%	0.0%	0.0		other	0.0%	0.0%	0.0
WALLS	total	109	995.0	9.1	ROOM FILL IN & ASSOCIATED	total	966	3319.5	3.4
	med.mammal	85.3%	33.9%	3.6		med.mammal	94.0%	72.1%	2.6
	lg.mammal	11.9%	65.1%	49.8		lg.mammal	5.0%	26.1%	18.1
	other	2.8%	1.0%	3.3		other	1.0%	1.8%	5.9
OCCUPATION IN	total	328	1768.0	5.4	UNDIFFER-ENTIATED FILL OUT	total	9	35.5	3.9
	med.mammal	85.4%	62.0%	3.9		med.mammal	100.0%	100.0%	3.9
	lg.mammal	12.8%	37.8%	15.9		lg.mammal	0.0%	0.0%	0.0
	other	1.8%	0.2%	0.6		other	0.0%	0.0%	0.0
OCCUPATION OUT & ASSOCIATED	total	633	2418.0	3.8	PLATFORM OR LEVELING	total	39	277.0	7.1
	med.mammal	92.3%	76.4%	3.2		med.mammal	84.6%	89.7%	7.5
	lg.mammal	7.1%	23.3%	12.5		lg.mammal	12.8%	9.2%	5.1
	other	0.6%	0.4%	2.1		other	2.6%	1.1%	3.0
OCCUPATION & FILL IN	total	749	3767.5	5.0	MIXED OR OTHER	total	54	298.5	5.5
	med.mammal	92.0%	51.7%	2.8		med.mammal	92.6%	57.8%	3.5
	lg.mammal	7.6%	48.1%	31.8		lg.mammal	7.4%	42.2%	31.5
	other	0.4%	0.1%	1.8		other	0.0%	0.0%	0.0
OCCUPATION & FILL OUT & ASSOCIATED	total	2107	6704.0	3.2	TOTAL	total	4994	19583.0	3.9
	med.mammal	90.4%	63.9%	2.3		med.mammal	91.1%	63.1%	2.7
	lg.mammal	6.8%	35.1%	16.3		lg.mammal	7.2%	36.1%	19.7
	other	2.8%	1.0%	1.1		other	1.7%	0.8%	1.8

Table 7.54

Table 7.55

Yahya IVC Total

Context:		Count	Count	--%--	Context:		Count	Count	--%--
RUBBLE	0-0&C-%0/C	0	0	--	MIDDEN	0-0&C-%0/C	0	0	--
	C-Bos-%Bos	0	0	--		C-Bos-%Bos	0	0	--
	0/C-oth-%oth	0	0	--		0/C-oth-%oth	0	0	--
	Av/Rp-Tot-%0	0	0	--		Av/Rp-Tot-%0	0	0	--
WALLS	0-0&C-%0/C	2	24	82.8%	ROOM FILL IN & ASSOCIATED	0-0&C-%0/C	18	193	95.1%
	C-Bos-%Bos	13	5	17.2%		C-Bos-%Bos	64	8	3.9%
	0/C-oth-%oth	9	0	0.0%		0/C-oth-%oth	111	2	1.0%
	Av/Rp-Tot-%0	0	29	13.3%		Av/Rp-Tot-%0	13	203	22.0%
OCCUPATION IN	0-0&C-%0/C	12	71	91.0%	UNDIFFER-ENTIATED FILL OUT	0-0&C-%0/C	1	3	100.0%
	C-Bos-%Bos	37	7	9.0%		C-Bos-%Bos	0	0	0.0%
	0/C-oth-%oth	22	0	0.0%		0/C-oth-%oth	2	0	0.0%
	Av/Rp-Tot-%0	2	78	24.5%		Av/Rp-Tot-%0	0	3	100.0%
OCCUPATION OUT & ASSOCIATED	0-0&C-%0/C	20	144	93.5%	PLATFORM OR LEVELING	0-0&C-%0/C	2	17	94.4%
	C-Bos-%Bos	57	6	3.9%		C-Bos-%Bos	9	0	0.0%
	0/C-oth-%oth	67	4	2.6%		0/C-oth-%oth	6	1	5.6%
	Av/Rp-Tot-%0	2	154	26.0%		Av/Rp-Tot-%0	0	18	18.2%
OCCUPATION & FILL IN	0-0&C-%0/C	18	139	90.8%	MIXED OR OTHER	0-0&C-%0/C	1	10	83.3%
	C-Bos-%Bos	61	11	7.2%		C-Bos-%Bos	6	2	16.7%
	0/C-oth-%oth	60	3	2.0%		0/C-oth-%oth	3	0	0.0%
	Av/Rp-Tot-%0	5	153	22.8%		Av/Rp-Tot-%0	0	12	14.3%
OCCUPATION & FILL OUT & ASSOCIATED	0-0&C-%0/C	56	349	88.8%	TOTAL	0-0&C-%0/C	130	950	91.1%
	C-Bos-%Bos	99	22	5.6%		C-Bos-%Bos	346	61	5.8%
	0/C-oth-%oth	194	22	5.6%		0/C-oth-%oth	474	32	3.1%
	Av/Rp-Tot-%0	11	393	36.1%		Av/Rp-Tot-%0	33	1043	27.3%

Yahya IV C Total

Context:		Count	Count	-%-	Context:		Count	Count	-%-
RUBBLE	tot-rodent-%r	0	0	--	MIDDEN	tot-rodent-%r	0	0	--
	pol-carniv-%c	0	0	--		pol-carniv-%c	0	0	--
	tool-burn-%b	0	0	--		tool-burn-%b	0	0	--
	blow-cut-%b&c	0	0	--		blow-cut-%b&c	0	0	--
WALLS	tot-rodent-%r	109	17	15.6%	ROOM FILL IN & ASSOCIATED	tot-rodent-%r	966	71	7.3%
	pol-carniv-%c	1	3	2.8%		pol-carniv-%c	0	6	0.6%
	tool-burn-%b	1	0	0.0%		tool-burn-%b	1	6	0.6%
	blow-cut-%b&c	0	5	4.6%		blow-cut-%b&c	0	24	2.5%
OCCUPATION IN	tot-rodent-%r	328	29	8.8%	UNDIFFER-ENTIATED FILL OUT	tot-rodent-%r	9	1	11.1%
	pol-carniv-%c	0	1	0.3%		pol-carniv-%c	0	1	11.1%
	tool-burn-%b	1	1	0.3%		tool-burn-%b	0	0	0.0%
	blow-cut-%b&c	0	18	5.5%		blow-cut-%b&c	0	0	0.0%
OCCUPATION OUT & ASSOCIATED	tot-rodent-%r	633	81	12.[illegible]%	PLATFORM OR LEVELING	tot-rodent-%r	39	8	20.5%
	pol-carniv-%c	1	6	0.9%		pol-carniv-%c	0	1	2.6%
	tool-burn-%b	1	4	0.6%		tool-burn-%b	0	0	0.0%
	blow-cut-%b&c	0	20	2.7%		blow-cut-%b&c	0	1	2.6%
OCCUPATION & FILL IN	tot-rodent-%r	749	77	10.3%	MIXED OR OTHER	tot-rodent-%r	54	4	7.4%
	pol-carniv-%c	0	6	0.8%		pol-carniv-%c	0	3	5.6%
	tool-burn-%b	0	4	0.5%		tool-burn-%b	0	0	0.0%
	blow-cut-%b&c	0	26	3.5%		blow-cut-%b&c	0	5	9.3%
OCCUPATION & FILL OUT & ASSOCIATED	tot-rodent-%r	2107	142	6.7%	TOTAL	tot-rodent-%r	4994	430	8.6%
	pol-carniv-%c	1	6	0.3%		pol-carniv-%c	3	33	0.7%
	tool-burn-%b	2	111	5.3%		tool-burn-%b	6	126	2.5%
	blow-cut-%b&c	0	44	2.1%		blow-cut-%b&c	0	143	2.9%

Table 7.56

TABLE 8.1

Percentages of sheep, goat, cattle, and other mammal for major temporal units summarized or calculated from "species" tables (Tables 7.2, 7.5, 7.8, 7.11)

Temporal Unit:	Yahya: R37	VII	VI	V	IVCsc	IVCns	IVCtot
%*Ovis*	24.9	21.6	20.8	26.9	24.0	27.1	24.9
%*Capra*	62.0	50.6	39.0	49.1	65.7	66.5	66.2
%*Bos*	8.9	24.8	36.2	18.0	8.2	1.4	5.8
%other	4.3	3.1	4.1	6.0	2.1	5.0	3.1
C:O ratio	2.5:1	2.3:1	1.9:1	1.8:1	2.7:1	2.5:1	2.7:1

Note: %*Ovis* = (O / (O + C)) x %O/C; %*Capra* = (C / (O + C) x %O/C where O = # specimens *Ovis*, C = # specimens *Capra*, and %O/C = (O + C + O/C) / Tot where O/C = # specimens identified only as "sheep or goat" and Tot = standardized count total of all mammal bones from temporal unit (see Chapter 7, Section 7.2.3); C:O ratio = %*Capra* / %*Ovis*; Other statistics come directly from "species" tables (noted above).

TABLES 8.2-8.37

Skeletal Part Distributions for Large and Medium Mammal Bones
from Tepe Yahya and Tepe Gaz Tavila-R37

See Chapter 8 for explanation

MEDIUM MAMMAL R37 TOTAL	NAT. DEP.	LEVEL -ING	FILL OUT	FILL IN	OC+FI OUT	OC+FI IN	OCC. OUT/A	OCC. IN	MIXED	TOT.	TOT-x	x%	x%-S%	(x%-S%)/S
x Horncore	9	1	0	9	7	5	9	3	3	46	46	6.0%	4.5%	2.24%
x Occiput	0	0	0	0	0	0	1	0	0	1	1	0.1%	-0.6%	-0.63%
Skull	8	1	1	10	7	2	10	4	3	46				
x Max/Tth	0	0	3	1	1	0	0	1	0	6	6	0.8%	-0.7%	-0.37%
Maxil.	0	0	0	3	1	0	1	2	0	7				
x Man/Tth	5	4	5	3	3	2	6	5	2	35	35	6.3%	4.7%	2.37%
Mandib.	25	1	8	13	12	5	7	5	7	83				
x up. D3/M3	2	0	0	0	1	1	2	0	1	7	7			
x lw. D3/M3	2	1	1	3	3	2	1	0	0	13	13			
Teeth	38	8	3	17	19	10	22	11	7	135				
Hyoid	1	0	0	0	0	0	0	0	0	1				
x Atl/Axis	2	0	1	1	0	2	2	1	0	9	9	1.2%	-0.3%	-0.17%
x Vert.	8	1	13	11	9	1	6	7	3	59	59	7.7%	-11.3%	-0.45%
x Sacrum	0	0	0	1	0	0	0	0	0	1	1	0.1%	-0.6%	-0.63%
x Ribs	66	13	21	59	69	18	62	41	12	361	361	47.0%	27.3%	1.05%
Cst/Str	0	0	0	0	0	0	0	1	0	1				
x d.Scap.	2	2	3	8	6	0	8	3	0	32	32	4.2%	2.7%	1.33%
Scapula	12	1	7	15	27	1	12	5	4	84				
x p.Hum.	0	0	0	1	1	0	0	1	0	3	3	0.4%	-1.1%	-0.56%
s.Hum.	7	1	1	5	12	1	9	5	1	42				
x d.Hum.	2	0	2	2	2	1	2	1	0	12	12	1.6%	0.0%	0.02%
x p.Rad.	3	0	2	3	1	1	2	1	1	14	14	1.8%	0.3%	0.15%
s.Rad.	14	1	5	18	13	2	14	7	5	79				
x d.Rad.	0	1	1	5	1	0	0	1	0	9	9	1.2%	-0.3%	-0.17%
x p.Ulna	1	1	1	1	0	0	0	0	0	4	4	0.5%	-1.0%	-0.50%
s.Ulna	6	1	2	4	5	1	7	5	1	32				
d.Ulna	0	0	0	0	0	0	0	0	0	0				
x Carpal	2	0	0	0	0	0	1	0	0	3	3	0.4%	-4.2%	-0.69%
x p.Mc.	2	1	2	3	7	1	2	1	0	19	19	2.5%	1.0%	0.51%
s.Mc.	1	0	1	3	3	0	1	0	0	9				
x d.Mc.	2	1	0	2	1	0	0	1	0	7	7	1.3%	-0.2%	-0.11%

Table 8.2-1

x	Acetab.	3	4	2	3	12	0	2	0	2	28	28	3.6%	2.1%	1.07%
	Pelvis	2	0	0	9	4	2	2	3	1	23				
x	p.Femur	0	0	3	3	2	0	1	1	0	10	10	1.3%	-0.2%	-0.11%
	s.Femur	12	1	2	21	12	5	6	4	3	66				
x	d.Femur	0	0	0	1	1	0	0	0	0	2	2	0.3%	-1.3%	-0.63%
x	Patella	1	0	1	0	0	0	0	0	0	2	2	0.3%	-1.3%	-0.63%
x	p.Tibia	0	1	0	0	0	0	2	1	0	4	4	0.5%	-1.0%	-0.50%
	s.Tibia	15	3	1	13	28	4	15	3	3	85				
x	d.Tibia	5	0	0	2	1	1	4	2	3	18	18	2.3%	0.8%	0.41%
x	Os Mal.	0	0	0	0	0	0	0	0	0	0	0	0.0%	-1.5%	-0.76%
x	Talus	1	1	1	3	2	1	1	0	2	12	12	1.6%	0.0%	0.02%
x	Calcan.	0	0	0	1	2	1	0	1	0	5	5	0.7%	-0.9%	-0.43%
x	Tarsal	0	0	2	0	0	0	0	0	0	2	2	0.3%	-2.0%	-0.67%
x	p.Mt.	1	4	1	3	4	2	2	0	0	17	17	2.3%	0.8%	0.38%
	s.Mt.	5	0	0	7	3	0	3	2	0	20				
x	d.Mt.	1	0	1	1	0	0	0	0	0	3	3	0.8%	-0.7%	-0.37%
x	p.Mp.	0	0	0	1	0	0	0	0	0	1	1			
	s.Mp.	4	2	0	3	1	0	2	4	0	16				
x	d.Mp.	0	0	0	2	1	0	2	0	1	6	6			
	Sesam.	0	0	0	0	0	0	0	0	0	0				
x	Ph.1	4	0	1	7	0	0	0	2	1	15	15	2.0%	-4.1%	-0.51%
x	Ph.2	0	0	0	0	0	0	0	0	0	0	0	0.0%	-6.1%	-0.76%
x	Ph.3	1	0	0	0	1	0	0	0	0	2	2	0.3%	-5.8%	-0.73%
	Shaft	174	44	127	195	156	62	116	49	45	968				
	Frags.	1	1	4	6	4	1	1	5	2	25				
	Other	6	2	4	2	0	0	3	0	0	17				
	TOTAL	456	103	233	484	445	135	349	189	113	2507 2507	768	99.1%	-0.9%	-0.80%

Table 8.2-2

Table 8.3

MEDIUM MAMMAL R37 TOTAL	NAT. DEP.	LEVEL -ING	FILL OUT	FILL IN	OC+FI OUT	OC+FI IN	OCC. OUT/A	OCC. IN	MIXED	TOT.	TOT-x	x%	x%-S%	(x%-S%)/S
x Ph.2	0	0	0	0	0	0	0	0	0	0	0	0.0%	-6.1%	-0.76%
x Os Mal.	0	0	0	0	0	0	0	0	0	0	0	0.0%	-1.5%	-0.76%
x Ph.3	1	0	0	0	1	0	0	0	0	2	2	0.3%	-5.8%	-0.73%
x Carpal	2	0	0	0	0	0	1	0	0	3	3	0.4%	-4.2%	-0.69%
x Tarsal	0	0	2	0	0	0	0	0	0	2	2	0.3%	-2.0%	-0.67%
x d.Femur	0	0	0	1	1	0	0	0	0	2	2	0.3%	-1.3%	-0.63%
x Patella	1	0	1	0	0	0	0	0	0	2	2	0.3%	-1.3%	-0.63%
x Occiput	0	0	0	0	0	0	1	0	0	1	1	0.1%	-0.6%	-0.63%
x Sacrum	0	0	0	1	0	0	0	0	0	1	1	0.1%	-0.6%	-0.63%
x p.Hum.	0	0	0	1	1	0	0	1	0	3	3	0.4%	-1.1%	-0.56%
x Ph.1	4	0	1	7	0	0	0	2	1	15	15	2.0%	-4.1%	-0.51%
x p.Ulna	1	1	1	1	0	0	0	0	0	4	4	0.5%	-1.0%	-0.50%
x p.Tibia	0	1	0	0	0	0	2	1	0	4	4	0.5%	-1.0%	-0.50%
x Vert.	8	1	13	11	9	1	6	7	3	59	59	7.7%	-11.3%	-0.45%
x Calcan.	0	0	0	1	2	1	0	1	0	5	5	0.7%	-0.9%	-0.43%
x Max/Tth	0	0	3	1	1	0	0	1	0	6	6	0.8%	-0.7%	-0.37%
x d.Mt.	1	0	1	1	0	0	0	0	0	3	3	0.8%	-0.7%	-0.37%
x Atl/Axis	2	0	1	1	0	2	2	1	0	9	9	1.2%	-0.3%	-0.17%
x d.Rad.	0	1	1	5	1	0	0	1	0	9	9	1.2%	-0.3%	-0.17%
x d.Mc.	2	1	0	2	1	0	0	1	0	7	7	1.3%	-0.2%	-0.11%
x p.Femur	0	0	3	3	2	0	1	1	0	10	10	1.3%	-0.2%	-0.11%
x d.Hum.	2	0	2	2	2	1	2	1	0	12	12	1.6%	0.0%	0.02%
x Talus	1	1	1	3	2	1	1	0	2	12	12	1.6%	0.0%	0.02%
x p.Rad.	3	0	2	3	1	1	2	1	1	14	14	1.8%	0.3%	0.15%
x p.Mt.	1	4	1	3	4	2	2	0	0	17	17	2.3%	0.8%	0.38%
x d.Tibia	5	0	0	2	1	1	4	2	3	18	18	2.3%	0.8%	0.41%
x p.Mc.	2	1	2	3	7	1	2	1	0	19	19	2.5%	1.0%	0.51%
x Ribs	66	13	21	59	69	18	62	41	12	361	361	47.0%	27.3%	1.05%
x Acetab.	3	4	2	3	12	0	2	0	2	28	28	3.6%	2.1%	1.07%
x d.Scap.	2	2	3	8	6	0	8	3	0	32	32	4.2%	2.7%	1.33%
x Horncore	9	1	0	9	7	5	9	3	3	46	46	6.0%	4.5%	2.24%
x Man/Tth	5	4	5	3	3	2	6	5	2	35	35	6.3%	4.7%	2.37%

LARGE MAMMAL R37 TOTAL	NAT. DEP.	LEVEL -ING	FILL OUT	FILL IN	OC+FI OUT	OC+FI IN	OCC. OUT/A	OCC. IN	MIXED	TOT.	TOT-x	x%	x%-S%	(x%-S%)/S
x Horncore	1	0	0	1	0	0	0	0	0	2	2	2.5%	1.0%	0.49%
x Occiput	0	0	0	0	0	0	0	0	0	0	0	0.0%	-0.8%	-0.76%
Skull	1	0	3	0	1	0	0	0	0	5				
x Max/Tth	0	0	0	0	0	0	0	0	0	0	0	0.0%	-1.5%	-0.76%
Maxil.	0	0	0	0	2	0	0	0	0	2				
x Man/Tth	0	0	1	0	0	0	0	0	0	1	1	2.5%	1.0%	0.49%
Mandib.	1	0	0	0	2	0	2	0	0	5				
x up. D3/M3	0	0	0	0	0	0	0	0	0	0	0			
x lw. D3/M3	0	0	0	0	1	0	0	0	0	1	1			
Teeth	2	0	0	0	1	0	1	0	0	4				
Hyoid	0	0	0	0	0	0	0	0	0	0				
x Atl/Axis	0	0	0	0	0	0	0	1	0	1	1	1.3%	-0.3%	-0.13%
x Vert.	4	2	3	3	4	1	0	0	0	17	17	21.3%	2.3%	0.09%
x Sacrum	1	0	0	0	0	0	0	1	0	2	2	2.5%	1.7%	1.74%
x Ribs	4	2	3	7	7	1	3	1	1	29	29	36.3%	16.6%	0.64%
Cst/Str	0	0	0	0	0	0	0	0	0	0				
x d.Scap.	0	0	0	0	1	0	0	0	0	1	1	1.3%	-0.3%	-0.13%
Scapula	0	0	0	0	0	0	1	1	0	2				
x p.Hum.	0	0	0	0	0	0	0	0	0	0	0	0.0%	-1.5%	-0.76%
s.Hum.	0	0	1	0	0	0	0	0	0	1				
x d.Hum.	0	0	0	0	1	0	0	0	0	1	1	1.3%	-0.3%	-0.13%
x p.Rad.	0	0	0	0	0	0	0	0	0	0	0	0.0%	-1.5%	-0.76%
s.Rad.	1	0	0	0	2	0	1	0	1	5				
x d.Rad.	1	0	0	0	2	0	0	0	0	3	3	3.8%	2.2%	1.12%
x p.Ulna	0	0	0	0	0	0	0	0	0	0	0	0.0%	-1.5%	-0.76%
s.Ulna	0	0	0	0	0	0	0	0	0	0				
d.Ulna	0	0	0	0	0	0	0	0	0	0				
x Carpal	1	0	0	0	0	0	1	0	0	2	2	2.5%	-2.0%	-0.34%
x p.Mc.	0	0	0	1	0	0	0	0	0	1	1	1.3%	-0.3%	-0.13%
s.Mc.	2	0	0	0	0	0	0	0	0	2				
x d.Mc.	1	0	0	0	0	0	0	1	0	2	2	3.1%	1.6%	0.80%

Table 8.4-1

Table 8.4-2

x Acetab.	0	0	0	1	1	0	1	0	0	3	3	3.8%	2.2%	1.12%
Pelvis	0	0	0	0	0	0	1	0	0	1				
x p.Femur	0	0	0	0	0	0	0	0	0	0	0	0.0%	-1.5%	-0.76%
s.Femur	2	0	0	0	0	0	0	0	0	2				
x d.Femur	0	0	0	0	0	0	0	0	0	0	0	0.0%	-1.5%	-0.76%
x Patella	0	0	0	0	0	0	0	0	0	0	0	0.0%	-1.5%	-0.76%
x p.Tibia	0	0	0	1	0	0	0	0	0	1	1	1.3%	-0.3%	-0.13%
s.Tibia	0	0	2	2	2	0	2	0	0	8				
x d.Tibia	0	0	0	0	0	0	1	0	0	1	1	1.3%	-0.3%	-0.13%
x Os Mal.	0	0	0	0	0	0	0	0	0	0	0	0.0%	-1.5%	-0.76%
x Talus	0	0	0	0	0	0	1	0	0	1	1	1.3%	-0.3%	-0.13%
x Calcan.	0	0	0	1	0	0	0	0	0	1	1	1.3%	-0.3%	-0.13%
x Tarsal	0	0	1	0	0	0	0	0	0	1	1	1.3%	-1.0%	-0.34%
x p.Mt.	0	0	0	0	0	0	0	0	0	0	0	0.0%	-1.5%	-0.76%
s.Mt.	0	0	0	1	1	0	0	0	0	2				
x d.Mt.	0	0	0	0	0	0	0	0	0	0	0	0.6%	-0.9%	-0.45%
x p.Mp.	0	0	0	0	0	0	0	0	0	0	0			
s.Mp.	1	0	0	0	0	0	2	0	0	3				
x d.Mp.	0	0	0	1	0	0	0	0	0	1	1			
Sesam.	0	0	0	1	0	0	0	0	0	1				
x Ph.1	0	0	0	0	0	1	0	0	1	2	2	2.5%	-3.6%	-0.45%
x Ph.2	0	0	0	3	0	1	1	0	0	5	5	6.3%	0.2%	0.02%
x Ph.3	0	1	0	0	0	0	0	0	0	1	1	1.3%	-4.8%	-0.60%
Shaft	21	0	4	15	9	5	13	2	2	71				
Frags.	8	3	11	16	13	7	10	3	3	74				
Other	0	0	0	0	0	0	0	1	0	1				
TOTAL	52	8	29	54	50	16	41	11	8	269 269	80	100.0%	0.0%	-4.29%

Table 8.5

LARGE MAMMAL R37 TOTAL	NAT. DEP.	LEVEL -ING	FILL OUT	FILL IN	OC+FI OUT	OC+FI IN	OCC. OUT/A	OCC. IN	MIXED	TOT.	TOT-x	x%	x%-S%	(x%-S%)/S
x Occiput	0	0	0	0	0	0	0	0	0	0	0	0.0%	-0.8%	-0.76%
x Max/Tth	0	0	0	0	0	0	0	0	0	0	0	0.0%	-1.5%	-0.76%
x p.Hum.	0	0	0	0	0	0	0	0	0	0	0	0.0%	-1.5%	-0.76%
x p.Rad.	0	0	0	0	0	0	0	0	0	0	0	0.0%	-1.5%	-0.76%
x p.Ulna	0	0	0	0	0	0	0	0	0	0	0	0.0%	-1.5%	-0.76%
x p.Femur	0	0	0	0	0	0	0	0	0	0	0	0.0%	-1.5%	-0.76%
x d.Femur	0	0	0	0	0	0	0	0	0	0	0	0.0%	-1.5%	-0.76%
x Patella	0	0	0	0	0	0	0	0	0	0	0	0.0%	-1.5%	-0.76%
x Os Mal.	0	0	0	0	0	0	0	0	0	0	0	0.0%	-1.5%	-0.76%
x p.Mt.	0	0	0	0	0	0	0	0	0	0	0	0.0%	-1.5%	-0.76%
x Ph.3	0	1	0	0	0	0	0	0	0	1	1	1.3%	-4.8%	-0.60%
x Ph.1	0	0	0	0	0	1	0	0	1	2	2	2.5%	-3.6%	-0.45%
x d.Mt.	0	0	0	0	0	0	0	0	0	0	0	0.6%	-0.9%	-0.45%
x Tarsal	0	0	1	0	0	0	0	0	0	1	1	1.3%	-1.0%	-0.34%
x Carpal	1	0	0	0	0	0	1	0	0	2	2	2.5%	-2.0%	-0.34%
x Atl/Axis	0	0	0	0	0	0	0	1	0	1	1	1.3%	-0.3%	-0.13%
x d.Scap.	0	0	0	0	1	0	0	0	0	1	1	1.3%	-0.3%	-0.13%
x d.Hum.	0	0	0	0	1	0	0	0	0	1	1	1.3%	-0.3%	-0.13%
x p.Mc.	0	0	0	1	0	0	0	0	0	1	1	1.3%	-0.3%	-0.13%
x p.Tibia	0	0	0	1	0	0	0	0	0	1	1	1.3%	-0.3%	-0.13%
x d.Tibia	0	0	0	0	0	0	1	0	0	1	1	1.3%	-0.3%	-0.13%
x Talus	0	0	0	0	0	0	1	0	0	1	1	1.3%	-0.3%	-0.13%
x Calcan.	0	0	0	1	0	0	0	0	0	1	1	1.3%	-0.3%	-0.13%
x Ph.2	0	0	0	3	0	1	1	0	0	5	5	6.3%	0.2%	0.02%
x Vert.	4	2	3	3	4	1	0	0	0	17	17	21.3%	2.3%	0.09%
x Horncore	1	0	0	1	0	0	0	0	0	2	2	2.5%	1.0%	0.49%
x Man/Tth	0	0	1	0	0	0	0	0	0	1	1	2.5%	1.0%	0.49%
x Ribs	4	2	3	7	7	1	3	1	1	29	29	36.3%	16.6%	0.64%
x d.Mc.	1	0	0	0	0	0	0	1	0	2	2	3.1%	1.6%	0.80%
x d.Rad.	1	0	0	0	2	0	0	0	0	3	3	3.8%	2.2%	1.12%
x Acetab.	0	0	0	1	1	0	1	0	0	3	3	3.8%	2.2%	1.12%
x Sacrum	1	0	0	0	0	0	0	1	0	2	2	2.5%	1.7%	1.74%

Table 8.6-1

MEDIUM MAMMAL

7 TOTALS	7D/E	7C	7B	7B/A	7A	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Horncore	3	4	21	6	9	43	43	3.1%	2	1.5%	1.6%	0.79%
x Occiput	0	2	5	0	0	7	7	0.5%	1	0.8%	-0.3%	-0.25%
Skull	3	3	47	5	6	64						
x Max/Tth	1	3	20	2	7	33	33	5.3%	2	1.5%	3.8%	1.88%
Maxil.	0	1	1	0	0	2						
x Man/Tth	4	6	58	11	29	108	108	11.2%	2	1.5%	9.7%	4.84%
Mandib.	6	13	67	3	11	100						
x up. D3/M3	4	3	24	2	7	40	40					
x lw. D3/M3	5	3	25	6	8	47	47					
Teeth	14	23	147	19	43	246						
Hyoid	0	0	3	0	0	3						
x Atl/Axis	0	3	8	3	2	16	16	1.2%	2	1.5%	-0.4%	-0.18%
x Vert.	4	16	64	8	25	117	117	8.4%	25	18.9%	-10.5%	-0.42%
x Sacrum	0	1	1	1	0	3	3	0.2%	1	0.8%	-0.5%	-0.54%
x Ribs	13	34	271	32	43	393	393	28.4%	26	19.7%	8.7%	0.33%
Cst/Str	0	0	1	0	0	1						
x d.Scap.	6	5	41	4	8	64	64	4.6%	2	1.5%	3.1%	1.55%
Scapula	9	16	72	9	8	114						
x p.Hum.	0	1	3	0	1	5	5	0.4%	2	1.5%	-1.2%	-0.58%
s.Hum.	6	13	39	12	9	79						
x d.Hum.	4	6	41	7	11	69	69	5.0%	2	1.5%	3.5%	1.73%
x p.Rad.	0	2	32	2	5	41	41	3.0%	2	1.5%	1.4%	0.72%
s.Rad.	13	8	74	20	21	136						
x d.Rad.	1	2	17	2	2	24	24	1.7%	2	1.5%	0.2%	0.11%
x p.Ulna	0	1	19	1	1	22	22	1.6%	2	1.5%	0.1%	0.04%
s.Ulna	3	6	37	7	8	61						
d.Ulna	0	0	1	0	0	1						
x Carpal	0	0	13	1	2	16	16	1.2%	6	4.5%	-3.4%	-0.57%
x p.Mc.	2	1	21	3	0	27	27	2.0%	2	1.5%	0.5%	0.25%
s.Mc.	0	2	6	0	4	12						
x d.Mc.	0	0	7	0	2	9	9	0.9%	2	1.5%	-0.6%	-0.31%

x	Acetab.	2	0	27	10	6	45	45	3.2%	2	1.5%	1.7%	0.87%
	Pelvis	4	2	21	1	4	32						
x	p.Femur	5	2	12	1	4	24	24	1.7%	2	1.5%	0.2%	0.11%
	s.Femur	5	10	39	4	5	63						
x	d.Femur	1	2	13	1	1	18	18	1.3%	2	1.5%	-0.2%	-0.11%
x	Patella	0	0	2	0	1	3	3	0.2%	2	1.5%	-1.3%	-0.65%
x	p.Tibia	0	0	9	0	0	9	9	0.6%	2	1.5%	-0.9%	-0.43%
	s.Tibia	4	13	57	12	9	95						
x	d.Tibia	2	2	17	4	1	26	26	1.9%	2	1.5%	0.4%	0.18%
x	Os Mal.	0	0	1	0	2	3	3	0.2%	2	1.5%	-1.3%	-0.65%
x	Talus	6	4	34	2	16	62	62	4.5%	2	1.5%	3.0%	1.48%
x	Calcan.	0	0	11	1	4	16	16	1.2%	2	1.5%	-0.4%	-0.18%
x	Tarsal	1	0	11	0	2	14	14	1.0%	3	2.3%	-1.3%	-0.42%
x	p.Mt.	2	2	18	0	3	25	25	1.9%	2	1.5%	0.4%	0.18%
	s.Mt.	0	3	11	1	1	16						
x	d.Mt.	0	2	8	1	3	14	14	1.3%	2	1.5%	-0.3%	-0.13%
x	p.Mp.	0	0	2	0	0	2	2					
	s.Mp.	0	0	4	1	1	6						
x	d.Mp.	0	1	6	0	0	7	7					
	Sesam.	0	0	0	0	0	0						
x	Ph.1	2	2	14	2	1	21	21	1.5%	8	6.1%	-4.5%	-0.57%
x	Ph.2	2	0	6	0	1	9	9	0.6%	8	6.1%	-5.4%	-0.68%
x	Ph.3	0	0	3	0	0	3	3	0.2%	8	6.1%	-5.8%	-0.73%
	Shaft	41	78	1069	129	96	1413						
	Frags.	0	4	116	1	3	124						
	Other	5	2	7	0	3	17						
	TOTAL	183	307	2704	337	439	3970	1385	100.0%	132	100.0%	0.0%	7.69%
							3970						

Table 8.6-2

MEDIUM MAMMAL

7 TOTALS	7D/E	7C	7B	7B/A	7A	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Ph.3	0	0	3	0	0	3	3	0.2%	8	6.1%	-5.8%	-0.73%
x Ph.2	2	0	6	0	1	9	9	0.6%	8	6.1%	-5.4%	-0.68%
x Patella	0	0	2	0	1	3	3	0.2%	2	1.5%	-1.3%	-0.65%
x Os Mal.	0	0	1	0	2	3	3	0.2%	2	1.5%	-1.3%	-0.65%
x p.Hum.	0	1	3	0	1	5	5	0.4%	2	1.5%	-1.2%	-0.58%
x Ph.1	2	2	14	2	1	21	21	1.5%	8	6.1%	-4.5%	-0.57%
x Carpal	0	0	13	1	2	16	16	1.2%	6	4.5%	-3.4%	-0.57%
x Sacrum	0	1	1	1	0	3	3	0.2%	1	0.8%	-0.5%	-0.54%
x p.Tibia	0	0	9	0	0	9	9	0.6%	2	1.5%	-0.9%	-0.43%
x Tarsal	1	0	11	0	2	14	14	1.0%	3	2.3%	-1.3%	-0.42%
x Vert.	4	16	64	8	25	117	117	8.4%	25	18.9%	-10.5%	-0.42%
x d.Mc.	0	0	7	0	2	9	9	0.9%	2	1.5%	-0.6%	-0.31%
x Occiput	0	2	5	0	0	7	7	0.5%	1	0.8%	-0.3%	-0.25%
x Atl/Axis	0	3	8	3	2	16	16	1.2%	2	1.5%	-0.4%	-0.18%
x Calcan.	0	0	11	1	4	16	16	1.2%	2	1.5%	-0.4%	-0.18%
x d.Mt.	0	2	8	1	3	14	14	1.3%	2	1.5%	-0.3%	-0.13%
x d.Femur	1	2	13	1	1	18	18	1.3%	2	1.5%	-0.2%	-0.11%
x p.Ulna	0	1	19	1	1	22	22	1.6%	2	1.5%	0.1%	0.04%
x d.Rad.	1	2	17	2	2	24	24	1.7%	2	1.5%	0.2%	0.11%
x p.Femur	5	2	12	1	4	24	24	1.7%	2	1.5%	0.2%	0.11%
x d.Tibia	2	2	17	4	1	26	26	1.9%	2	1.5%	0.4%	0.18%
x p.Mt.	2	2	18	0	3	25	25	1.9%	2	1.5%	0.4%	0.18%
x p.Mc.	2	1	21	3	0	27	27	2.0%	2	1.5%	0.5%	0.25%
x Ribs	13	34	271	32	43	393	393	28.4%	26	19.7%	8.7%	0.33%
x p.Rad.	0	2	32	2	5	41	41	3.0%	2	1.5%	1.4%	0.72%
x Horncore	3	4	21	6	9	43	43	3.1%	2	1.5%	1.6%	0.79%
x Acetab.	2	0	27	10	6	45	45	3.2%	2	1.5%	1.7%	0.87%
x Talus	6	4	34	2	16	62	62	4.5%	2	1.5%	3.0%	1.48%
x d.Scap.	6	5	41	4	8	64	64	4.6%	2	1.5%	3.1%	1.55%
x d.Hum.	4	6	41	7	11	69	69	5.0%	2	1.5%	3.5%	1.73%
x Max/Tth	1	3	20	2	7	33	33	5.3%	2	1.5%	3.8%	1.88%
x Man/Tth	4	6	58	11	29	108	108	11.2%	2	1.5%	9.7%	4.84%

Table 8.7

Table 8.8-1

LARGE MAMMAL 7 TOTALS	7D/E	7C	7B	7B/A	7A	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Horncore	0	0	2	0	0	2	2	0.4%	2	1.5%	-1.1%	-0.56%
x Occiput	0	1	3	0	0	4	4	0.8%	1	0.8%	0.0%	0.03%
Skull	3	1	21	1	1	27						
x Max/Tth	0	1	4	0	3	8	8	2.5%	2	1.5%	1.0%	0.51%
Maxil.	0	1	2	0	0	3						
x Man/Tth	0	0	4	1	2	7	7	3.1%	2	1.5%	1.6%	0.81%
Mandib.	0	3	13	0	9	25						
x up. D3/M3	1	0	3	0	1	5	5					
x lw. D3/M3	0	3	3	0	3	9	9					
Teeth	6	3	26	2	20	57						
Hyoid	0	1	0	0	0	1						
x Atl/Axis	0	4	6	1	2	13	13	2.5%	2	1.5%	1.0%	0.51%
x Vert.	3	16	48	6	9	82	82	16.0%	25	18.9%	-2.9%	-0.12%
x Sacrum	0	0	2	0	0	2	2	0.4%	1	0.8%	-0.4%	-0.37%
x Ribs	14	24	60	11	19	128	128	25.0%	26	19.7%	5.4%	0.21%
Cst/Str	0	0	2	0	0	2						
x d.Scap.	0	2	3	1	0	6	6	1.2%	2	1.5%	-0.3%	-0.17%
Scapula	1	6	9	0	2	18						
x p.Hum.	0	0	2	0	0	2	2	0.4%	2	1.5%	-1.1%	-0.56%
s.Hum.	0	0	7	2	0	9						
x d.Hum.	0	2	5	1	1	9	9	1.8%	2	1.5%	0.2%	0.12%
x p.Rad.	0	0	9	1	0	10	10	2.0%	2	1.5%	0.4%	0.22%
s.Rad.	0	0	7	0	0	7						
x d.Rad.	0	0	1	1	2	4	4	0.8%	2	1.5%	-0.7%	-0.37%
x p.Ulna	0	0	4	0	3	7	7	1.4%	2	1.5%	-0.1%	-0.07%
s.Ulna	2	1	8	1	0	12						
d.Ulna	0	0	0	0	0	0						
x Carpal	2	8	14	2	4	30	30	5.9%	6	4.5%	1.3%	0.22%
x p.Mc.	0	4	9	1	1	15	15	3.0%	2	1.5%	1.5%	0.76%
s.Mc.	1	0	7	0	0	8						
x d.Mc.	1	0	2	1	3	7	7	1.9%	2	1.5%	0.3%	0.17%

x	Acetab.	0	5	10	1	3	19	19	3.7%	2	1.5%	2.2%	1.10%
	Pelvis	0	1	3	0	1	5						
x	p.Femur	0	1	3	1	4	9	9	1.8%	2	1.5%	0.2%	0.12%
	s.Femur	1	0	2	0	0	3						
x	d.Femur	1	2	1	1	0	5	5	1.0%	2	1.5%	-0.5%	-0.27%
x	Patella	1	1	0	0	0	2	2	0.4%	2	1.5%	-1.1%	-0.56%
x	p.Tibia	1	0	1	0	1	3	3	0.6%	2	1.5%	-0.9%	-0.46%
	s.Tibia	0	6	5	0	0	11						
x	d.Tibia	0	2	5	1	0	8	8	1.6%	2	1.5%	0.1%	0.03%
x	Os Mal.	0	0	2	1	0	3	3	0.6%	2	1.5%	-0.9%	-0.46%
x	Talus	2	4	6	0	0	12	12	2.3%	2	1.5%	0.8%	0.42%
x	Calcan.	0	1	7	3	4	15	15	2.9%	2	1.5%	1.4%	0.71%
x	Tarsal	0	3	8	2	0	13	13	2.5%	3	2.3%	0.3%	0.09%
x	p.Mt.	1	2	4	0	1	8	8	1.7%	2	1.5%	0.1%	0.07%
	s.Mt.	0	1	3	2	0	6						
x	d.Mt.	0	3	6	1	1	11	11	2.6%	2	1.5%	1.1%	0.56%
x	p.Mp.	0	1	0	0	0	1	1					
	s.Mp.	0	0	1	0	0	1						
x	d.Mp.	1	0	3	0	1	5	5					
	Sesam.	0	0	2	0	1	3						
x	Ph.1	0	5	10	4	4	23	23	4.5%	8	6.1%	-1.6%	-0.19%
x	Ph.2	2	3	6	3	4	18	18	3.5%	8	6.1%	-2.5%	-0.32%
x	Ph.3	0	0	4	0	2	6	6	1.2%	8	6.1%	-4.9%	-0.61%
	Shaft	26	38	163	56	53	336						
	Frags.	7	17	202	27	11	264						
	Other	0	0	2	1	4	7						
	TOTAL	77	177	745	137	180	1316 1316	511	100.0%	132	100.0%	0.0%	1.57%

Table 8.8-2

LARGE MAMMAL 7 TOTALS	7D/E	7C	7B	7B/A	7A	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Ph.3	0	0	4	0	2	6	6	1.2%	8	6.1%	-4.9%	-0.61%
x Horncore	0	0	2	0	0	2	2	0.4%	2	1.5%	-1.1%	-0.56%
x p.Hum.	0	0	2	0	0	2	2	0.4%	2	1.5%	-1.1%	-0.56%
x Patella	1	1	0	0	0	2	2	0.4%	2	1.5%	-1.1%	-0.56%
x p.Tibia	1	0	1	0	1	3	3	0.6%	2	1.5%	-0.9%	-0.46%
x Os Mal.	0	0	2	1	0	3	3	0.6%	2	1.5%	-0.9%	-0.46%
x d.Rad.	0	0	1	1	2	4	4	0.8%	2	1.5%	-0.7%	-0.37%
x Sacrum	0	0	2	0	0	2	2	0.4%	1	0.8%	-0.4%	-0.37%
x Ph.2	2	3	6	3	4	18	18	3.5%	8	6.1%	-2.5%	-0.32%
x d.Femur	1	2	1	1	0	5	5	1.0%	2	1.5%	-0.5%	-0.27%
x Ph.1	0	5	10	4	4	23	23	4.5%	8	6.1%	-1.6%	-0.19%
x d.Scap.	0	2	3	1	0	6	6	1.2%	2	1.5%	-0.3%	-0.17%
x Vert.	3	16	48	6	9	82	82	16.0%	25	18.9%	-2.9%	-0.12%
x p.Ulna	0	0	4	0	3	7	7	1.4%	2	1.5%	-0.1%	-0.07%
x Occiput	0	1	3	0	0	4	4	0.8%	1	0.8%	0.0%	0.03%
x d.Tibia	0	2	5	1	0	8	8	1.6%	2	1.5%	0.1%	0.03%
x p.Mt.	1	2	4	0	1	8	8	1.7%	2	1.5%	0.1%	0.07%
x Tarsal	0	3	8	2	0	13	13	2.5%	3	2.3%	0.3%	0.09%
x d.Hum.	0	2	5	1	1	9	9	1.8%	2	1.5%	0.2%	0.12%
x p.Femur	0	1	3	1	4	9	9	1.8%	2	1.5%	0.2%	0.12%
x d.Mc.	1	0	2	1	3	7	7	1.9%	2	1.5%	0.3%	0.17%
x Ribs	14	24	60	11	19	128	128	25.0%	26	19.7%	5.4%	0.21%
x p.Rad.	0	0	9	1	0	10	10	2.0%	2	1.5%	0.4%	0.22%
x Carpal	2	8	14	2	4	30	30	5.9%	6	4.5%	1.3%	0.22%
x Talus	2	4	6	0	0	12	12	2.3%	2	1.5%	0.8%	0.42%
x Max/Tth	0	1	4	0	3	8	8	2.5%	2	1.5%	1.0%	0.51%
x Atl/Axis	0	4	6	1	2	13	13	2.5%	2	1.5%	1.0%	0.51%
x d.Mt.	0	3	6	1	1	11	11	2.6%	2	1.5%	1.1%	0.56%
x Calcan.	0	1	7	3	4	15	15	2.9%	2	1.5%	1.4%	0.71%
x p.Mc.	0	4	9	1	1	15	15	3.0%	2	1.5%	1.5%	0.76%
x Man/Tth	0	0	4	1	2	7	7	3.1%	2	1.5%	1.6%	0.81%
x Acetab.	0	5	10	1	3	19	19	3.7%	2	1.5%	2.2%	1.10%

Table 8.9

Table 8.10-1

MEDIUM MAMMAL 7B TOTALS	IN	OUT	OIO	IOF	OOF	MID	OFI	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Horncore	4	0	0	0	8	7	2	21	21	2.4%	2	1.5%	0.9%	0.43%
x Occiput	1	0	0	0	1	2	1	5	5	0.6%	1	0.8%	-0.2%	-0.19%
Skull	12	0	0	0	15	16	4	47						
x Max/Tth	6	2	0	1	8	1	2	20	20	5.0%	2	1.5%	3.5%	1.73%
Maxil.	0	0	0	0	1	0	0	1						
x Man/Tth	16	5	1	3	25	5	3	58	58	9.4%	2	1.5%	7.9%	3.93%
Mandib.	17	0	0	2	27	19	2	67						
x up. D3/M3	6	3	0	0	9	4	2	24	24					
x lw. D3/M3	4	2	1	2	12	3	1	25	25					
Teeth	34	6	3	5	59	32	8	147						
Hyoid	0	0	0	0	0	1	2	3						
x Atl/Axis	1	3	0	1	2	0	1	8	8	0.9%	2	1.5%	-0.6%	-0.31%
x Vert.	18	0	0	3	23	12	8	64	64	7.2%	25	18.9%	-11.7%	-0.47%
x Sacrum	0	0	0	0	1	0	0	1	1	0.1%	1	0.8%	-0.6%	-0.64%
x Ribs	103	2	5	0	70	70	21	271	271	30.6%	26	19.7%	10.9%	0.42%
Cst/Str	0	0	0	0	0	0	1	1						
x d.Scap.	6	5	3	3	17	6	1	41	41	4.6%	2	1.5%	3.1%	1.56%
Scapula	15	3	1	1	35	12	5	72						
x p.Hum.	0	1	0	0	1	1	0	3	3	0.3%	2	1.5%	-1.2%	-0.59%
s.Hum.	3	2	1	2	22	5	4	39						
x d.Hum.	6	3	0	2	22	4	4	41	41	4.6%	2	1.5%	3.1%	1.56%
x p.Rad.	5	0	1	2	14	6	4	32	32	3.6%	2	1.5%	2.1%	1.05%
s.Rad.	18	2	1	0	42	10	1	74						
x d.Rad.	3	3	0	0	9	2	0	17	17	1.9%	2	1.5%	0.4%	0.20%
x p.Ulna	3	0	0	2	10	3	1	19	19	2.1%	2	1.5%	0.6%	0.32%
s.Ulna	8	1	1	0	15	9	3	37						
d.Ulna	1	0	0	0	0	0	0	1						
x Carpal	2	0	0	0	7	2	2	13	13	1.5%	6	4.5%	-3.1%	-0.51%
x p.Mc.	5	0	0	0	8	6	2	21	21	2.5%	2	1.5%	1.0%	0.49%
s.Mc.	0	0	1	0	5	0	0	6						
x d.Mc.	1	0	0	0	2	2	2	7	7	1.1%	2	1.5%	-0.4%	-0.19%

x	Acetab.	5	0	1	0	13	7	1	27	27	3.1%	2	1.5%	1.5%	0.77%
	Pelvis	2	1	0	0	11	7	0	21						
x	p.Femur	1	0	0	0	8	2	1	12	12	1.4%	2	1.5%	-0.2%	-0.08%
	s.Femur	10	0	3	0	17	6	3	39						
x	d.Femur	3	2	0	0	7	1	0	13	13	1.5%	2	1.5%	0.0%	-0.02%
x	Patella	0	0	0	0	2	0	0	2	2	0.2%	2	1.5%	-1.3%	-0.64%
x	p.Tibia	5	1	0	0	2	1	0	9	9	1.0%	2	1.5%	-0.5%	-0.25%
	s.Tibia	8	0	5	1	27	10	6	57						
x	d.Tibia	1	2	0	0	10	3	1	17	17	1.9%	2	1.5%	0.4%	0.20%
x	Os Mal.	0	0	0	0	1	0	0	1	1	0.1%	2	1.5%	-1.4%	-0.70%
x	Talus	3	2	4	3	18	2	2	34	34	3.8%	2	1.5%	2.3%	1.16%
x	Calcan.	1	1	0	0	6	3	0	11	11	1.2%	2	1.5%	-0.3%	-0.14%
x	Tarsal	0	0	1	0	5	3	2	11	11	1.2%	3	2.3%	-1.0%	-0.34%
x	p.Mt.	2	1	0	0	7	8	0	18	18	2.1%	2	1.5%	0.6%	0.32%
	s.Mt.	1	0	0	0	8	2	0	11						
x	d.Mt.	2	1	0	0	4	1	0	8	8	1.2%	2	1.5%	-0.3%	-0.14%
x	p.Mp.	0	0	0	0	0	2	0	2	2					
	s.Mp.	0	0	1	0	2	1	0	4						
x	d.Mp.	0	1	0	0	3	2	0	6	6					
	Sesam.	0	0	0	0	0	0	0	0						
x	Ph.1	0	3	0	0	5	4	2	14	14	1.6%	8	6.1%	-4.5%	-0.56%
x	Ph.2	0	2	0	0	2	0	2	6	6	0.7%	8	6.1%	-5.4%	-0.67%
x	Ph.3	0	1	0	0	0	1	1	3	3	0.3%	8	6.1%	-5.7%	-0.72%
	Shaft	123	16	1	2	231	615	81	1069						
	Frags.	19	5	7	0	14	71	0	116						
	Other	0	0	0	0	5	2	0	7						
	TOTAL	484	82	42	35	878	994	189	2704	885	100.0%	132	100.0%	0.0%	6.97%
									2704						

Table 8.10-2

MEDIUM MAMMAL 7B TOTALS	IN	OUT	OIO	IOF	OOF	MID	OFI	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Ph.3	0	1	0	0	0	1	1	3	3	0.3%	8	6.1%	-5.7%	-0.72%
x Os Mal.	0	0	0	0	1	0	0	1	1	0.1%	2	1.5%	-1.4%	-0.70%
x Ph.2	0	2	0	0	2	0	2	6	6	0.7%	8	6.1%	-5.4%	-0.67%
x Patella	0	0	0	0	2	0	0	2	2	0.2%	2	1.5%	-1.3%	-0.64%
x Sacrum	0	0	0	0	1	0	0	1	1	0.1%	1	0.8%	-0.6%	-0.64%
x p.Hum.	0	1	0	0	1	1	0	3	3	0.3%	2	1.5%	-1.2%	-0.59%
x Ph.1	0	3	0	0	5	4	2	14	14	1.6%	8	6.1%	-4.5%	-0.56%
x Carpal	2	0	0	0	7	2	2	13	13	1.5%	6	4.5%	-3.1%	-0.51%
x Vert.	18	0	0	3	23	12	8	64	64	7.2%	25	18.9%	-11.7%	-0.47%
x Tarsal	0	0	1	0	5	3	2	11	11	1.2%	3	2.3%	-1.0%	-0.34%
x Atl/Axis	1	3	0	1	2	0	1	8	8	0.9%	2	1.5%	-0.6%	-0.31%
x p.Tibia	5	1	0	0	2	1	0	9	9	1.0%	2	1.5%	-0.5%	-0.25%
x d.Mc.	1	0	0	0	2	2	2	7	7	1.1%	2	1.5%	-0.4%	-0.19%
x Occiput	1	0	0	0	1	2	1	5	5	0.6%	1	0.8%	-0.2%	-0.19%
x Calcan.	1	1	0	0	6	3	0	11	11	1.2%	2	1.5%	-0.3%	-0.14%
x d.Mt.	2	1	0	0	4	1	0	8	8	1.2%	2	1.5%	-0.3%	-0.14%
x p.Femur	1	0	0	0	8	2	1	12	12	1.4%	2	1.5%	-0.2%	-0.08%
x d.Femur	3	2	0	0	7	1	0	13	13	1.5%	2	1.5%	0.0%	-0.02%
x d.Rad.	3	3	0	0	9	2	0	17	17	1.9%	2	1.5%	0.4%	0.20%
x d.Tibia	1	2	0	0	10	3	1	17	17	1.9%	2	1.5%	0.4%	0.20%
x p.Ulna	3	0	0	2	10	3	1	19	19	2.1%	2	1.5%	0.6%	0.32%
x p.Mt.	2	1	0	0	7	8	0	18	18	2.1%	2	1.5%	0.6%	0.32%
x Ribs	103	2	5	0	70	70	21	271	271	30.6%	26	19.7%	10.9%	0.42%
x Horncore	4	0	0	0	8	7	2	21	21	2.4%	2	1.5%	0.9%	0.43%
x p.Mc.	5	0	0	0	8	6	2	21	21	2.5%	2	1.5%	1.0%	0.49%
x Acetab.	5	0	1	0	13	7	1	27	27	3.1%	2	1.5%	1.5%	0.77%
x p.Rad.	5	0	1	2	14	6	4	32	32	3.6%	2	1.5%	2.1%	1.05%
x Talus	3	2	4	3	18	2	2	34	34	3.8%	2	1.5%	2.3%	1.16%
x d.Scap.	6	5	3	3	17	6	1	41	41	4.6%	2	1.5%	3.1%	1.56%
x d.Hum.	6	3	0	2	22	4	4	41	41	4.6%	2	1.5%	3.1%	1.56%
x Max/Tth	6	2	0	1	8	1	2	20	20	5.0%	2	1.5%	3.5%	1.73%
x Man/Tth	16	5	1	3	25	5	3	58	58	9.4%	2	1.5%	7.9%	3.93%

Table 8.11

LARGE MAMMAL 7B TOTALS	IN	OUT	OIO	IOF	OOF	MID	OFI	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Horncore	0	0	0	1	1	0	0	2	2	0.8%	2	1.5%	-0.7%	-0.37%
x Occiput	0	0	0	0	2	1	0	3	3	1.2%	1	0.8%	0.4%	0.40%
Skull	0	3	0	1	12	2	3	21						
x Max/Tth	0	0	0	1	1	1	1	4	4	2.7%	2	1.5%	1.2%	0.59%
Maxil.	1	0	0	0	1	0	0	2						
x Man/Tth	0	0	1	0	2	1	0	4	4	2.7%	2	1.5%	1.2%	0.59%
Mandib.	0	1	1	1	2	3	5	13						
x up. D3/M3	0	0	0	0	2	1	0	3	3					
x lw. D3/M3	0	0	0	0	2	1	0	3	3					
Teeth	7	2	0	0	13	1	3	26						
Hyoid	0	0	0	0	0	0	0	0						
x Atl/Axis	0	1	2	0	3	0	0	6	6	2.3%	2	1.5%	0.8%	0.40%
x Vert.	22	3	0	1	14	4	4	48	48	18.5%	25	18.9%	-0.5%	-0.02%
x Sacrum	0	0	0	0	1	1	0	2	2	0.8%	1	0.8%	0.0%	0.01%
x Ribs	15	2	2	1	25	10	5	60	60	23.1%	26	19.7%	3.4%	0.13%
Cst/Str	1	0	0	0	1	0	0	2						
x d.Scap.	0	1	0	0	1	0	1	3	3	1.2%	2	1.5%	-0.4%	-0.18%
Scapula	0	0	0	1	5	1	2	9						
x p.Hum.	1	0	0	0	1	0	0	2	2	0.8%	2	1.5%	-0.7%	-0.37%
s.Hum.	0	0	0	0	6	0	1	7						
x d.Hum.	0	1	0	0	4	0	0	5	5	1.9%	2	1.5%	0.4%	0.20%
x p.Rad.	1	4	0	0	4	0	0	9	9	3.5%	2	1.5%	1.9%	0.97%
s.Rad.	0	0	0	0	7	0	0	7						
x d.Rad.	0	0	0	0	1	0	0	1	1	0.4%	2	1.5%	-1.1%	-0.57%
x p.Ulna	1	1	0	0	2	0	0	4	4	1.5%	2	1.5%	0.0%	0.01%
s.Ulna	0	2	0	0	5	0	1	8						
d.Ulna	0	0	0	0	0	0	0	0						
x Carpal	5	1	0	1	4	2	1	14	14	5.4%	6	4.5%	0.8%	0.14%
x p.Mc.	2	0	0	1	5	1	0	9	9	3.5%	2	1.5%	1.9%	0.97%
s.Mc.	0	0	0	0	4	3	0	7						
x d.Mc.	0	0	0	0	0	1	1	2	2	1.3%	2	1.5%	-0.2%	-0.08%

Table 8.12-1

Table 8.12-2

x Acetab.	1	3	0	0	5	0	1	10	10	3.8%	2	1.5%	2.3%	1.17%
Pelvis	0	0	0	1	1	1	0	3						
x p.Femur	1	0	1	0	1	0	0	3	3	1.2%	2	1.5%	-0.4%	-0.18%
s.Femur	0	0	0	0	1	0	1	2						
x d.Femur	1	0	0	0	0	0	0	1	1	0.4%	2	1.5%	-1.1%	-0.57%
x Patella	0	0	0	0	0	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Tibia	0	0	0	0	1	0	0	1	1	0.4%	2	1.5%	-1.1%	-0.57%
s.Tibia	0	0	0	1	2	2	0	5						
x d.Tibia	1	0	1	2	1	0	0	5	5	1.9%	2	1.5%	0.4%	0.20%
x Os Mal.	0	0	1	0	0	0	1	2	2	0.8%	2	1.5%	-0.7%	-0.37%
x Talus	2	0	0	0	2	2	0	6	6	2.3%	2	1.5%	0.8%	0.40%
x Calcan.	2	1	0	0	3	1	0	7	7	2.7%	2	1.5%	1.2%	0.59%
x Tarsal	3	0	0	0	2	2	1	8	8	3.1%	3	2.3%	0.8%	0.27%
x p.Mt.	1	0	0	0	1	2	0	4	4	1.5%	2	1.5%	0.0%	0.01%
s.Mt.	0	0	0	0	0	3	0	3						
x d.Mt.	0	1	0	1	2	0	2	6	6	2.9%	2	1.5%	1.4%	0.68%
x p.Mp.	0	0	0	0	0	0	0	0	0					
s.Mp.	0	0	1	0	0	0	0	1						
x d.Mp.	1	0	0	0	2	0	0	3	3					
Sesam.	0	0	0	0	2	0	0	2						
x Ph.1	4	0	0	0	5	1	0	10	10	3.8%	8	6.1%	-2.2%	-0.28%
x Ph.2	1	0	0	1	3	0	1	6	6	2.3%	8	6.1%	-3.8%	-0.47%
x Ph.3	0	0	0	1	2	1	0	4	4	1.5%	8	6.1%	-4.5%	-0.57%
Shaft	12	10	2	1	76	40	22	163						
Frags.	15	3	2	4	31	135	12	202						
Other	0	0	1	0	1	0	0	2						
TOTAL	101	40	15	21	275	224	69	745 745	260	100.0%	132	100.0%	0.0%	2.38%

Table 8.13

LARGE MAMMAL 7B TOTALS	IN	OUT	OIO	IOF	OOF	MID	OFI	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Patella	0	0	0	0	0	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x d.Rad.	0	0	0	0	1	0	0	1	1	0.4%	2	1.5%	-1.1%	-0.57%
x d.Femur	1	0	0	0	0	0	0	1	1	0.4%	2	1.5%	-1.1%	-0.57%
x p.Tibia	0	0	0	0	1	0	0	1	1	0.4%	2	1.5%	-1.1%	-0.57%
x Ph.3	0	0	0	1	2	1	0	4	4	1.5%	8	6.1%	-4.5%	-0.57%
x Ph.2	1	0	0	1	3	0	1	6	6	2.3%	8	6.1%	-3.8%	-0.47%
x Horncore	0	0	0	1	1	0	0	2	2	0.8%	2	1.5%	-0.7%	-0.37%
x p.Hum.	1	0	0	0	1	0	0	2	2	0.8%	2	1.5%	-0.7%	-0.37%
x Os Mal.	0	0	1	0	0	0	1	2	2	0.8%	2	1.5%	-0.7%	-0.37%
x Ph.1	4	0	0	0	5	1	0	10	10	3.8%	8	6.1%	-2.2%	-0.28%
x d.Scap.	0	1	0	0	1	0	1	3	3	1.2%	2	1.5%	-0.4%	-0.18%
x p.Femur	1	0	1	0	1	0	0	3	3	1.2%	2	1.5%	-0.4%	-0.18%
x d.Mc.	0	0	0	0	0	1	1	2	2	1.3%	2	1.5%	-0.2%	-0.08%
x Vert.	22	3	0	1	14	4	4	48	48	18.5%	25	18.9%	-0.5%	-0.02%
x p.Ulna	1	1	0	0	2	0	0	4	4	1.5%	2	1.5%	0.0%	0.01%
x p.Mt.	1	0	0	0	1	2	0	4	4	1.5%	2	1.5%	0.0%	0.01%
x Sacrum	0	0	0	0	1	1	0	2	2	0.8%	1	0.8%	0.0%	0.01%
x Ribs	15	2	2	1	25	10	5	60	60	23.1%	26	19.7%	3.4%	0.13%
x Carpal	5	1	0	1	4	2	1	14	14	5.4%	6	4.5%	0.8%	0.14%
x d.Hum.	0	1	0	0	4	0	0	5	5	1.9%	2	1.5%	0.4%	0.20%
x d.Tibia	1	0	1	2	1	0	0	5	5	1.9%	2	1.5%	0.4%	0.20%
x Tarsal	3	0	0	0	2	2	1	8	8	3.1%	3	2.3%	0.8%	0.27%
x Atl/Axis	0	1	2	0	3	0	0	6	6	2.3%	2	1.5%	0.8%	0.40%
x Talus	2	0	0	0	2	2	0	6	6	2.3%	2	1.5%	0.8%	0.40%
x Occiput	0	0	0	0	2	1	0	3	3	1.2%	1	0.8%	0.4%	0.40%
x Max/Tth	0	0	0	1	1	1	1	4	4	2.7%	2	1.5%	1.2%	0.59%
x Man/Tth	0	0	1	0	2	1	0	4	4	2.7%	2	1.5%	1.2%	0.59%
x Calcan.	2	1	0	0	3	1	0	7	7	2.7%	2	1.5%	1.2%	0.59%
x d.Mt.	0	1	0	1	2	0	2	6	6	2.9%	2	1.5%	1.4%	0.68%
x p.Rad.	1	4	0	0	4	0	0	9	9	3.5%	2	1.5%	1.9%	0.97%
x p.Mc.	2	0	0	1	5	1	0	9	9	3.5%	2	1.5%	1.9%	0.97%
x Acetab.	1	3	0	0	5	0	1	10	10	3.8%	2	1.5%	2.3%	1.17%

Table 8.14-1

MEDIUM MAMMAL 6 TOTALS	6B RUB	6A RUB	6B/A WLS	6B IN	6B MID	6B OFI	6A OFI	6B/A PLT	6B/A MXD	TOT.	x-TOT	x%	STAN-DARD	S%	x%-S%	(x%-S%)/S
x Horncore	5	5	0	0	7	5	0	1	1	24	24	3.8%	2	1.5%	2.3%	1.14%
x Occiput	1	1	0	0	0	1	0	0	0	3	3	0.5%	1	0.8%	-0.3%	-0.28%
Skull	6	6	0	1	11	4	0	0	0	28						
x Max/Tth	3	2	0	0	11	1	0	1	1	19	19	7.1%	2	1.5%	5.6%	2.81%
Maxil.	0	1	0	0	1	1	0	0	0	3						
x Man/Tth	15	17	1	5	23	10	0	1	1	73	73	16.0%	2	1.5%	14.5%	7.25%
Mandib.	12	28	3	0	10	3	0	0	0	56						
x up. D3/M3	4	13	0	0	5	4	0	0	0	26	26					
x lw. D3/M3	3	15	0	1	6	2	0	0	1	28	28					
Teeth	33	73	3	2	40	6	1	2	5	165						
Hyoid	0	1	1	0	0	0	0	0	0	2						
x Atl/Axis	3	2	0	0	7	0	0	2	0	14	14	2.2%	2	1.5%	0.7%	0.35%
x Vert.	2	13	0	0	24	5	0	6	0	50	50	7.9%	25	18.9%	-11.0%	-0.44%
x Sacrum	0	0	0	0	1	0	0	0	0	1	1	0.2%	1	0.8%	-0.6%	-0.60%
x Ribs	14	17	0	0	30	13	0	8	3	85	85	13.5%	26	19.7%	-6.2%	-0.24%
Cst/Str	0	0	0	0	1	0	0	0	0	1						
x d.Scap.	2	7	0	0	4	1	0	0	0	14	14	2.2%	2	1.5%	0.7%	0.35%
Scapula	11	21	1	0	9	3	0	1	6	52						
x p.Hum.	1	2	0	0	3	0	0	1	0	7	7	1.1%	2	1.5%	-0.4%	-0.20%
s.Hum.	5	25	1	0	13	2	0	0	2	48						
x d.Hum.	10	14	0	0	13	1	0	1	1	40	40	6.3%	2	1.5%	4.8%	2.41%
x p.Rad.	3	8	0	0	7	2	0	1	0	21	21	3.3%	2	1.5%	1.8%	0.91%
s.Rad.	7	35	3	0	9	2	0	0	3	59						
x d.Rad.	1	3	1	0	4	1	0	0	0	10	10	1.6%	2	1.5%	0.1%	0.03%
x p.Ulna	1	2	0	0	4	1	0	1	0	9	9	1.4%	2	1.5%	-0.1%	-0.04%
s.Ulna	6	10	1	0	9	1	0	0	1	28						
d.Ulna	0	0	0	0	0	0	0	0	0	0						
x Carpal	1	1	0	0	1	0	0	0	0	3	3	0.5%	6	4.5%	-4.1%	-0.68%
x p.Mc.	2	3	0	0	0	1	0	0	2	8	8	1.3%	2	1.5%	-0.2%	-0.12%
s.Mc.	1	1	0	0	0	0	0	0	0	2						
x d.Mc.	1	1	0	0	4	1	0	0	2	9	9	1.5%	2	1.5%	0.0%	0.00%

x	Acetab.	6	5	0	0	7	2	0	0	1	21	21	3.3%	2	1.5%	1.8%	0.91%
	Pelvis	1	4	1	0	3	1	0	0	0	10						
x	p.Femur	2	4	0	0	4	1	0	1	0	12	12	1.9%	2	1.5%	0.4%	0.19%
	s.Femur	2	12	0	0	3	0	0	1	3	21						
x	d.Femur	3	10	0	0	5	1	0	1	0	20	20	3.2%	2	1.5%	1.7%	0.83%
x	Patella	0	0	0	0	3	2	0	0	0	5	5	0.8%	2	1.5%	-0.7%	-0.36%
x	p.Tibia	2	0	0	0	0	0	0	0	0	2	2	0.3%	2	1.5%	-1.2%	-0.60%
	s.Tibia	4	26	0	0	10	3	1	0	3	47						
x	d.Tibia	1	10	0	1	5	1	0	3	0	21	21	3.3%	2	1.5%	1.8%	0.91%
x	Os Mal.	0	0	0	1	0	0	0	2	0	3	3	0.5%	2	1.5%	-1.0%	-0.52%
x	Talus	8	12	1	0	8	5	1	3	1	39	39	6.2%	2	1.5%	4.7%	2.33%
x	Calcan.	3	2	0	1	6	2	0	2	2	18	18	2.9%	2	1.5%	1.3%	0.67%
x	Tarsal	0	2	0	0	8	0	0	0	0	10	10	1.6%	3	2.3%	-0.7%	-0.23%
x	p.Mt.	0	7	0	0	4	1	0	1	1	14	14	2.2%	2	1.5%	0.7%	0.35%
	s.Mt.	1	5	0	0	1	0	0	0	0	7						
x	d.Mt.	1	3	0	0	1	1	0	0	0	6	6	1.0%	2	1.5%	-0.5%	-0.24%
x	p.Mp.	0	0	0	0	0	0	0	0	0	0	0					
	s.Mp.	3	3	0	0	2	2	0	0	0	10						
x	d.Mp.	0	1	0	0	0	0	0	0	0	1	1					
	Sesam.	0	0	0	0	0	0	0	0	0	0						
x	Ph.1	0	1	0	0	4	3	0	0	1	9	9	1.4%	8	6.1%	-4.6%	-0.58%
x	Ph.2	4	0	0	0	1	0	0	0	0	5	5	0.8%	8	6.1%	-5.3%	-0.66%
x	Ph.3	0	0	0	0	1	0	0	0	0	1	1	0.2%	8	6.1%	-5.9%	-0.74%
	Shaft	134	252	3	2	116	59	0	17	47	630						
	Frags.	20	9	0	0	0	5	0	0	0	34						
	Other	0	7	0	0	0	4	0	0	0	11						
	TOTAL	348	702	20	14	449	164	3	57	88	1845 1845	631	100.0%	132	100.0%	0.0%	14.90%

Table 8.14-2

MEDIUM MAMMAL 6 TOTALS	6B RUB	6A RUB	6B/A WLS	6B IN	6B MID	6B OFI	6A OFI	6B/A PLT	6B/A MXD	TOT.	x-TOT	x%	STAN-DARD	S%	x%-S%	(x%-S%)/S
x Ph.3	0	0	0	0	1	0	0	0	0	1	1	0.2%	8	6.1%	-5.9%	-0.74%
x Carpal	1	1	0	0	1	0	0	0	0	3	3	0.5%	6	4.5%	-4.1%	-0.68%
x Ph.2	4	0	0	0	1	0	0	0	0	5	5	0.8%	8	6.1%	-5.3%	-0.66%
x p.Tibia	2	0	0	0	0	0	0	0	0	2	2	0.3%	2	1.5%	-1.2%	-0.60%
x Sacrum	0	0	0	0	1	0	0	0	0	1	1	0.2%	1	0.8%	-0.6%	-0.60%
x Ph.1	0	1	0	0	4	3	0	0	1	9	9	1.4%	8	6.1%	-4.6%	-0.58%
x Os Mal.	0	0	0	1	0	0	0	2	0	3	3	0.5%	2	1.5%	-1.0%	-0.52%
x Vert.	2	13	0	0	24	5	0	6	0	50	50	7.9%	25	18.9%	-11.0%	-0.44%
x Patella	0	0	0	0	3	2	0	0	0	5	5	0.8%	2	1.5%	-0.7%	-0.36%
x Occiput	1	1	0	0	0	1	0	0	0	3	3	0.5%	1	0.8%	-0.3%	-0.28%
x d.Mt.	1	3	0	0	1	1	0	0	0	6	6	1.0%	2	1.5%	-0.5%	-0.24%
x Ribs	14	17	0	0	30	13	0	8	3	85	85	13.5%	26	19.7%	-6.2%	-0.24%
x Tarsal	0	2	0	0	8	0	0	0	0	10	10	1.6%	3	2.3%	-0.7%	-0.23%
x p.Hum.	1	2	0	0	3	0	0	1	0	7	7	1.1%	2	1.5%	-0.4%	-0.20%
x p.Mc.	2	3	0	0	0	1	0	0	2	8	8	1.3%	2	1.5%	-0.2%	-0.12%
x p.Ulna	1	2	0	0	4	1	0	1	0	9	9	1.4%	2	1.5%	-0.1%	-0.04%
x d.Mc.	1	1	0	0	4	1	0	0	2	9	9	1.5%	2	1.5%	0.0%	0.00%
x d.Rad.	1	3	1	0	4	1	0	0	0	10	10	1.6%	2	1.5%	0.1%	0.03%
x p.Femur	2	4	0	0	4	1	0	1	0	12	12	1.9%	2	1.5%	0.4%	0.19%
x Atl/Axis	3	2	0	0	7	0	0	2	0	14	14	2.2%	2	1.5%	0.7%	0.35%
x d.Scap.	2	7	0	0	4	1	0	0	0	14	14	2.2%	2	1.5%	0.7%	0.35%
x p.Mt.	0	7	0	0	4	1	0	1	1	14	14	2.2%	2	1.5%	0.7%	0.35%
x Calcan.	3	2	0	1	6	2	0	2	2	18	18	2.9%	2	1.5%	1.3%	0.67%
x d.Femur	3	10	0	0	5	1	0	1	0	20	20	3.2%	2	1.5%	1.7%	0.83%
x p.Rad.	3	8	0	0	7	2	0	1	0	21	21	3.3%	2	1.5%	1.8%	0.91%
x Acetab.	6	5	0	0	7	2	0	0	1	21	21	3.3%	2	1.5%	1.8%	0.91%
x d.Tibia	1	10	0	1	5	1	0	3	0	21	21	3.3%	2	1.5%	1.8%	0.91%
x Horncore	5	5	0	0	7	5	0	1	1	24	24	3.8%	2	1.5%	2.3%	1.14%
x Talus	8	12	1	0	8	5	1	3	1	39	39	6.2%	2	1.5%	4.7%	2.33%
x d.Hum.	10	14	0	0	13	1	0	1	1	40	40	6.3%	2	1.5%	4.8%	2.41%
x Max/Tth	3	2	0	0	11	1	0	1	1	19	19	7.1%	2	1.5%	5.6%	2.81%
x Man/Tth	15	17	1	5	23	10	0	1	1	73	73	16.0%	2	1.5%	14.5%	7.25%

Table 8.15

Table 8.16-1

LARGE MAMMAL 6 TOTALS	6B RUB	6A RUB	6B/A WLS	6B IN	6B MID	6B OFI	6A OFI	6B/A PLT	6B/A MXD	TOT.	x-TOT	x%	STAN-DARD	S%	x%-S%	(x%-S%)/S
x Horncore	1	3	0	0	0	1	0	0	0	5	5	1.2%	2	1.5%	-0.3%	-0.14%
x Occiput	0	0	0	0	0	1	0	0	0	1	1	0.2%	1	0.8%	-0.5%	-0.51%
Skull	3	11	0	0	5	7	1	0	0	27						
x Max/Tth	1	1	0	0	0	1	0	0	0	3	3	2.2%	2	1.5%	0.7%	0.35%
Maxil.	1	2	0	0	0	1	0	0	0	4						
x Man/Tth	1	0	0	0	0	2	0	0	0	3	3	2.5%	2	1.5%	0.9%	0.47%
Mandib.	7	8	1	0	4	0	0	0	0	20						
x up. D3/M3	3	2	0	0	1	0	0	0	0	6	6					
x lw. D3/M3	0	3	1	1	1	1	0	0	0	7	7					
Teeth	9	21	2	1	6	3	0	1	0	43						
Hyoid	0	1	0	0	0	0	0	0	0	1						
x Atl/Axis	0	0	0	0	1	0	0	0	0	1	1	0.2%	2	1.5%	-1.3%	-0.64%
x Vert.	1	11	0	0	12	0	0	0	[illegible]	27	27	6.6%	25	18.9%	-12.3%	-0.49%
x Sacrum	0	0	0	0	2	0	0	0	[illegible]	2	2	0.5%	1	0.8%	-0.3%	-0.27%
x Ribs	13	34	0	0	13	5	0	0	11	76	76	18.6%	26	19.7%	-1.1%	-0.04%
Cst/Str	0	0	0	0	1	0	0	0	0	1						
x d.Scap.	0	3	0	0	0	1	0	0	0	4	4	1.0%	2	1.5%	-0.5%	-0.27%
Scapula	5	9	0	1	3	2	0	1	0	21						
x p.Hum.	0	0	0	0	0	0	0	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
s.Hum.	1	4	0	0	0	0	1	0	0	6						
x d.Hum.	2	6	0	0	0	3	0	0	0	11	11	2.7%	2	1.5%	1.2%	0.59%
x p.Rad.	2	7	0	0	0	1	0	0	0	10	10	2.5%	2	1.5%	0.9%	0.47%
s.Rad.	1	3	0	0	1	1	0	0	0	6						
x d.Rad.	0	3	0	0	0	0	0	0	0	3	3	0.7%	2	1.5%	-0.8%	-0.39%
x p.Ulna	1	4	0	0	3	2	0	0	0	10	10	2.5%	2	1.5%	0.9%	0.47%
s.Ulna	1	5	0	0	0	1	0	0	0	7						
d.Ulna	0	0	0	0	0	0	0	0	0	0						
x Carpal	2	10	0	0	2	0	1	1	0	16	16	3.9%	6	4.5%	-0.6%	-0.10%
x p.Mc.	2	5	0	0	1	1	0	0	1	10	10	2.6%	2	1.5%	1.1%	0.53%
s.Mc.	0	2	0	0	1	0	0	0	0	3						
x d.Mc.	4	3	2	0	1	0	1	0	2	13	13	4.3%	2	1.5%	2.8%	1.39%

x	Acetab.	1	7	2	0	0	1	0	0	0	11	11	2.7%	2	1.5%	1.2%	0.59%
	Pelvis	1	4	0	0	0	1	0	0	2	8						
x	p.Femur	1	3	0	0	2	1	0	0	2	9	9	2.2%	2	1.5%	0.7%	0.35%
	s.Femur	1	1	0	0	1	0	0	0	2	5						
x	d.Femur	0	2	0	0	0	0	0	0	0	2	2	0.5%	2	1.5%	-1.0%	-0.51%
x	Patella	0	1	0	0	0	0	0	0	0	1	1	0.2%	2	1.5%	-1.3%	-0.64%
x	p.Tibia	1	0	0	0	0	1	0	0	0	2	2	0.5%	2	1.5%	-1.0%	-0.51%
	s.Tibia	2	5	0	0	0	2	0	1	1	11						
x	d.Tibia	2	2	0	0	1	0	0	1	1	7	7	1.7%	2	1.5%	0.2%	0.10%
x	Os Mal.	0	2	0	0	1	0	0	0	1	4	4	1.0%	2	1.5%	-0.5%	-0.27%
x	Talus	3	12	0	1	3	1	1	1	2	24	24	5.9%	2	1.5%	4.4%	2.18%
x	Calcan.	2	6	0	0	1	2	0	1	1	13	13	3.2%	2	1.5%	1.7%	0.84%
x	Tarsal	0	8	0	0	2	0	0	0	0	10	10	2.5%	3	2.3%	0.2%	0.06%
x	p.Mt.	2	7	0	0	0	2	0	1	1	13	13	3.3%	2	1.5%	1.8%	0.90%
	s.Mt.	0	7	0	0	0	1	0	1	0	9						
x	d.Mt.	2	6	0	0	0	0	0	0	0	8	8	3.1%	2	1.5%	1.5%	0.77%
x	p.Mp.	1	0	0	0	0	0	0	0	0	1	1					
	s.Mp.	0	0	0	0	0	0	0	0	0	0						
x	d.Mp.	2	7	0	0	0	0	0	0	0	9	9					
	Sesam.	1	0	0	0	4	0	0	0	1	6						
x	Ph.1	7	24	0	0	3	2	0	2	1	39	39	9.6%	8	6.1%	3.5%	0.44%
x	Ph.2	3	17	1	0	5	2	0	0	0	28	28	6.9%	8	6.1%	0.8%	0.10%
x	Ph.3	2	10	0	0	3	0	0	1	3	19	19	4.7%	8	6.1%	-1.4%	-0.18%
	Shaft	116	193	2	4	30	15	4	4	21	389						
	Frags.	39	32	1	0	2	14	0	4	30	122						
	Other	3	5	0	0	6	1	0	0	0	15						
	TOTAL	253	522	12	8	122	80	9	20	86	1112 1112	408	100.0%	132	100.0%	0.0%	4.86%

Table 8.16-2

LARGE MAMMAL 6 TOTALS	6B RUB	6A RUB	6B/A WLS	6B IN	6B MID	6B OFI	6A OFI	6B/A PLT	6B/A MXD	TOT.	x-TOT	x%	STAN-DARD	S%	x%-S%	(x%-S%)/S
x p.Hum.	0	0	0	0	0	0	0	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Atl/Axis	0	0	0	0	1	0	0	0	0	1	1	0.2%	2	1.5%	-1.3%	-0.64%
x Patella	0	1	0	0	0	0	0	0	0	1	1	0.2%	2	1.5%	-1.3%	-0.64%
x d.Femur	0	2	0	0	0	0	0	0	0	2	2	0.5%	2	1.5%	-1.0%	-0.51%
x p.Tibia	1	0	0	0	0	1	0	0	0	2	2	0.5%	2	1.5%	-1.0%	-0.51%
x Occiput	0	0	0	0	0	1	0	0	0	1	1	0.2%	1	0.8%	-0.5%	-0.51%
x Vert.	1	11	0	0	12	0	0	0	3	27	27	6.6%	25	18.9%	-12.3%	-0.49%
x d.Rad.	0	3	0	0	0	0	0	0	0	3	3	0.7%	2	1.5%	-0.8%	-0.39%
x d.Scap.	0	3	0	0	0	1	0	0	0	4	4	1.0%	2	1.5%	-0.5%	-0.27%
x Os Mal.	0	2	0	0	1	0	0	0	1	4	4	1.0%	2	1.5%	-0.5%	-0.27%
x Sacrum	0	0	0	0	2	0	0	0	0	2	2	0.5%	1	0.8%	-0.3%	-0.27%
x Ph.3	2	10	0	0	3	0	0	1	3	19	19	4.7%	8	6.1%	-1.4%	-0.18%
x Horncore	1	3	0	0	0	1	0	0	0	5	5	1.2%	2	1.5%	-0.3%	-0.14%
x Carpal	2	10	0	0	2	0	1	1	0	16	16	3.9%	6	4.5%	-0.6%	-0.10%
x Ribs	13	34	0	0	13	5	0	0	11	76	76	18.6%	26	19.7%	-1.1%	-0.04%
x Tarsal	0	8	0	0	2	0	0	0	0	10	10	2.5%	3	2.3%	0.2%	0.06%
x Ph.2	3	17	1	0	5	2	0	0	0	28	28	6.9%	8	6.1%	0.8%	0.10%
x d.Tibia	2	2	0	0	1	0	0	1	1	7	7	1.7%	2	1.5%	0.2%	0.10%
x Max/Tth	1	1	0	0	0	1	0	0	0	3	3	2.2%	2	1.5%	0.7%	0.35%
x p.Femur	1	3	0	0	2	1	0	0	2	9	9	2.2%	2	1.5%	0.7%	0.35%
x Ph.1	7	24	0	0	3	2	0	2	1	39	39	9.6%	8	6.1%	3.5%	0.44%
x Man/Tth	1	0	0	0	0	2	0	0	0	3	3	2.5%	2	1.5%	0.9%	0.47%
x p.Rad.	2	7	0	0	0	1	0	0	0	10	10	2.5%	2	1.5%	0.9%	0.47%
x p.Ulna	1	4	0	0	3	2	0	0	0	10	10	2.5%	2	1.5%	0.9%	0.47%
x p.Mc.	2	5	0	0	1	1	0	0	1	10	10	2.6%	2	1.5%	1.1%	0.53%
x d.Hum.	2	6	0	0	0	3	0	0	0	11	11	2.7%	2	1.5%	1.2%	0.59%
x Acetab.	1	7	2	0	0	1	0	0	0	11	11	2.7%	2	1.5%	1.2%	0.59%
x d.Mt.	2	6	0	0	0	0	0	0	0	8	8	3.1%	2	1.5%	1.5%	0.77%
x Calcan.	2	6	0	0	1	2	0	1	1	13	13	3.2%	2	1.5%	1.7%	0.84%
x p.Mt.	2	7	0	0	0	2	0	1	1	13	13	3.3%	2	1.5%	1.8%	0.90%
x d.Mc.	4	3	2	0	1	0	1	0	2	13	13	4.3%	2	1.5%	2.8%	1.39%
x Talus	3	12	0	1	3	1	1	1	2	24	24	5.9%	2	1.5%	4.4%	2.18%

Table 8.17

Table 8.18-1

MEDIUM MAMMAL 5 TOTALS	5C TOT.	5C/B OUT	5B TOT.	5C/A RUB.	5B/A OFI	5A TOT.	TOT.	x-TOT	x%	STAN-DARD	S%	x%-S%	(x%-S%)/S
x Horncore	2	0	2	0	0	6	10	10	2.0%	2	1.5%	0.5%	0.25%
x Occiput	1	0	0	1	1	2	5	5	1.0%	1	0.8%	0.2%	0.25%
Skull	3	0	6	0	1	5	15						
x Max/Tth	1	0	0	0	0	2	3	3	2.8%	2	1.5%	1.3%	0.65%
Maxil.	0	0	0	0	0	1	1						
x Man/Tth	7	0	13	0	2	14	36	36	10.4%	2	1.5%	8.9%	4.46%
Mandib.	6	0	11	0	1	8	26						
x up. D3/M3	4	1	4	0	0	2	11	11					
x lw. D3/M3	3	0	4	2	0	7	16	16					
Teeth	15	2	26	5	9	41	98						
Hyoid	0	0	0	0	0	0	0						
x Atl/Axis	3	0	0	0	0	5	8	8	1.6%	2	1.5%	0.1%	0.05%
x Vert.	12	0	12	0	8	17	49	49	9.8%	25	18.9%	-9.1%	-0.36%
x Sacrum	1	0	0	0	0	0	1	1	0.2%	1	0.8%	-0.6%	-0.56%
x Ribs	17	1	22	1	10	28	79	79	15.9%	26	19.7%	-3.8%	-0.15%
Cst/Str	0	0	0	0	0	0	0						
x d.Scap.	1	0	2	0	0	5	8	8	1.6%	2	1.5%	0.1%	0.05%
Scapula	8	0	4	2	2	8	24						
x p.Hum.	2	0	1	1	0	1	5	5	1.0%	2	1.5%	-0.5%	-0.26%
s.Hum.	11	0	5	1	1	13	31						
x d.Hum.	10	0	5	1	1	11	28	28	5.6%	2	1.5%	4.1%	2.05%
x p.Rad.	2	0	7	0	1	5	15	15	3.0%	2	1.5%	1.5%	0.75%
s.Rad.	2	1	12	1	5	17	38						
x d.Rad.	5	1	0	0	2	4	12	12	2.4%	2	1.5%	0.9%	0.45%
x p.Ulna	2	0	7	0	0	8	17	17	3.4%	2	1.5%	1.9%	0.95%
s.Ulna	2	1	3	0	0	6	12						
d.Ulna	0	0	0	0	0	0	0						
x Carpal	1	0	1	0	0	0	2	2	0.4%	6	4.5%	-4.1%	-0.69%
x p.Mc.	5	0	2	0	0	3	10	10	2.1%	2	1.5%	0.6%	0.30%
s.Mc.	0	0	1	0	0	1	2						
x d.Mc.	1	0	0	0	0	3	4	4	1.0%	2	1.5%	-0.5%	-0.26%

x Acetab.	2	0	2	2	1	14	21	21	4.2%	2	1.5%	2.7%	1.35%
Pelvis	0	0	1	0	0	4	5						
x p.Femur	5	0	7	0	1	8	21	21	4.2%	2	1.5%	2.7%	1.35%
s.Femur	7	0	8	0	1	15	31						
x d.Femur	1	0	2	2	2	5	12	12	2.4%	2	1.5%	0.9%	0.45%
x Patella	0	0	1	0	0	3	4	4	0.8%	2	1.5%	-0.7%	-0.36%
x p.Tibia	2	0	4	0	0	4	10	10	2.0%	2	1.5%	0.5%	0.25%
s.Tibia	6	1	22	0	4	23	56						
x d.Tibia	2	0	3	0	2	10	17	17	3.4%	2	1.5%	1.9%	0.95%
x Os Mal.	0	0	0	0	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Talus	4	2	8	1	2	14	31	31	6.2%	2	1.5%	4.7%	2.35%
x Calcan.	1	0	6	0	0	8	15	15	3.0%	2	1.5%	1.5%	0.75%
x Tarsal	2	0	0	0	0	0	2	2	0.4%	3	2.3%	-1.9%	-0.62%
x p.Mt.	2	0	3	1	0	12	18	18	3.7%	2	1.5%	2.2%	1.10%
s.Mt.	0	0	1	0	0	1	2						
x d.Mt.	1	0	1	0	0	4	6	6	1.4%	2	1.5%	-0.1%	-0.05%
x p.Mp.	0	0	0	0	1	0	1	1					
s.Mp.	1	0	1	0	1	2	5						
x d.Mp.	0	0	1	0	0	1	2	2					
Sesam.	0	0	0	0	0	0	0						
x Ph.1	1	0	7	0	1	5	14	14	2.8%	8	6.1%	-3.2%	-0.41%
x Ph.2	2	0	1	0	1	1	5	5	1.0%	8	6.1%	-5.1%	-0.63%
x Ph.3	0	0	0	0	0	0	0	0	0.0%	8	6.1%	-6.1%	-0.76%
Shaft	76	16	90	13	33	165	393						
Frags.	8	2	12	2	0	9	33						
Other	0	2	7	3	2	6	20						
TOTAL	250	30	338	39	96	537	1290 1290	498	100.0%	132	100.0%	0.0%	12.88%

Table 8.18-2

MEDIUM MAMMAL 5 TOTALS	5C TOT.	5C/B OUT	5B TOT.	5C/A RUB.	5B/A OFI	5A TOT.	TOT.	x-TOT	x%	STAN-DARD	S%	x%-S%	(x%-S%)/S
x Ph.3	0	0	0	0	0	0	0	0	0.0%	8	6.1%	-6.1%	-0.76%
x Os Mal.	0	0	0	0	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Carpal	1	0	1	0	0	0	2	2	0.4%	6	4.5%	-4.1%	-0.69%
x Ph.2	2	0	1	0	1	1	5	5	1.0%	8	6.1%	-5.1%	-0.63%
x Tarsal	2	0	0	0	0	0	2	2	0.4%	3	2.3%	-1.9%	-0.62%
x Sacrum	1	0	0	0	0	0	1	1	0.2%	1	0.8%	-0.6%	-0.56%
x Ph.1	1	0	7	0	1	5	14	14	2.8%	8	6.1%	-3.2%	-0.41%
x Vert.	12	0	12	0	8	17	49	49	9.8%	25	18.9%	-9.1%	-0.36%
x Patella	0	0	1	0	0	3	4	4	0.8%	2	1.5%	-0.7%	-0.36%
x p.Hum.	2	0	1	1	0	1	5	5	1.0%	2	1.5%	-0.5%	-0.26%
x d.Mc.	1	0	0	0	0	3	4	4	1.0%	2	1.5%	-0.5%	-0.26%
x Ribs	17	1	22	1	10	28	79	79	15.9%	26	19.7%	-3.8%	-0.15%
x d.Mt.	1	0	1	0	0	4	6	6	1.4%	2	1.5%	-0.1%	-0.05%
x Atl/Axis	3	0	0	0	0	5	8	8	1.6%	2	1.5%	0.1%	0.05%
x d.Scap.	1	0	2	0	0	5	8	8	1.6%	2	1.5%	0.1%	0.05%
x Horncore	2	0	2	0	0	6	10	10	2.0%	2	1.5%	0.5%	0.25%
x p.Tibia	2	0	4	0	0	4	10	10	2.0%	2	1.5%	0.5%	0.25%
x Occiput	1	0	0	1	1	2	5	5	1.0%	1	0.8%	0.2%	0.25%
x p.Mc.	5	0	2	0	0	3	10	10	2.1%	2	1.5%	0.6%	0.30%
x d.Rad.	5	1	0	0	2	4	12	12	2.4%	2	1.5%	0.9%	0.45%
x d.Femur	1	0	2	2	2	5	12	12	2.4%	2	1.5%	0.9%	0.45%
x Max/Tth	1	0	0	0	0	2	3	3	2.8%	2	1.5%	1.3%	0.65%
x p.Rad.	2	0	7	0	1	5	15	15	3.0%	2	1.5%	1.5%	0.75%
x Calcan.	1	0	6	0	0	8	15	15	3.0%	2	1.5%	1.5%	0.75%
x p.Ulna	2	0	7	0	0	8	17	17	3.4%	2	1.5%	1.9%	0.95%
x d.Tibia	2	0	3	0	2	10	17	17	3.4%	2	1.5%	1.9%	0.95%
x p.Mt.	2	0	3	1	0	12	18	18	3.7%	2	1.5%	2.2%	1.10%
x Acetab.	2	0	2	2	1	14	21	21	4.2%	2	1.5%	2.7%	1.35%
x p.Femur	5	0	7	0	1	8	21	21	4.2%	2	1.5%	2.7%	1.35%
x d.Hum.	10	0	5	1	1	11	28	28	5.6%	2	1.5%	4.1%	2.05%
x Talus	4	2	8	1	2	14	31	31	6.2%	2	1.5%	4.7%	2.35%
x Man/Tth	7	0	13	0	2	14	36	36	10.4%	2	1.5%	8.9%	4.46%

Table 8.19

LARGE MAMMAL 5 TOTALS	5C TOT.	5C/B OUT	5B TOT.	5C/A RUB.	5B/A OFI	5A TOT.	TOT.	x-TOT	x%	STAN-DARD	S%	x%-S%	(x%-S%)/S
x Horncore	0	0	0	0	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Occiput	0	0	2	0	0	0	2	2	1.3%	1	0.8%	0.6%	0.58%
Skull	1	0	12	0	1	6	20						
x Max/Tth	0	0	0	0	0	0	0	0	1.3%	2	1.5%	-0.2%	-0.09%
Maxil.	0	0	1	0	0	0	1						
x Man/Tth	1	0	0	0	0	1	2	2	4.0%	2	1.5%	2.5%	1.26%
Mandib.	4	0	2	0	0	14	20						
x up. D3/M3	1	0	0	1	0	0	2	2					
x lw. D3/M3	0	0	0	3	1	0	4	4					
Teeth	5	0	4	0	0	10	19						
Hyoid	0	0	1	0	0	1	2						
x Atl/Axis	0	0	0	0	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Vert.	4	0	0	0	0	4	8	8	5.4%	25	18.9%	-13.6%	-0.54%
x Sacrum	0	0	0	0	0	0	0	0	0.0%	1	0.8%	-0.8%	-0.76%
x Ribs	9	3	7	2	4	24	49	49	32.9%	26	19.7%	13.2%	0.51%
Cst/Str	0	0	0	0	0	0	0						
x d.Scap.	1	0	0	0	0	0	1	1	0.7%	2	1.5%	-0.8%	-0.42%
Scapula	0	0	2	0	0	0	2						
x p.Hum.	0	0	0	0	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
s.Hum.	0	0	0	1	0	0	1						
x d.Hum.	1	0	1	0	0	0	2	2	1.3%	2	1.5%	-0.2%	-0.09%
x p.Rad.	1	0	0	0	0	0	1	1	0.7%	2	1.5%	-0.8%	-0.42%
s.Rad.	3	0	1	0	0	1	5						
x d.Rad.	0	0	0	0	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Ulna	1	0	0	0	0	0	1	1	0.7%	2	1.5%	-0.8%	-0.42%
s.Ulna	3	0	0	0	0	1	4						
d.Ulna	0	0	0	0	0	0	0						
x Carpal	0	0	1	0	0	2	3	3	2.0%	6	4.5%	-2.5%	-0.42%
x p.Mc.	1	0	0	0	0	1	2	2	1.7%	2	1.5%	0.2%	0.08%
s.Mc.	0	0	0	0	0	0	0						
x d.Mc.	0	0	0	0	0	0	0	0	0.7%	2	1.5%	-0.8%	-0.42%

Table 8.20-1

x Acetab.	0	0	3	0	0	5	8	8	5.4%	2	1.5%	3.9%	1.93%
Pelvis	1	0	0	0	0	2	3						
x p.Femur	0	0	0	0	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
s.Femur	0	0	1	0	0	1	2						
x d.Femur	0	0	0	0	0	1	1	1	0.7%	2	1.5%	-0.8%	-0.42%
x Patella	0	0	0	0	0	1	1	1	0.7%	2	1.5%	-0.8%	-0.42%
x p.Tibia	0	0	0	0	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
s.Tibia	2	0	2	0	0	2	6						
x d.Tibia	0	0	0	0	0	2	2	2	1.3%	2	1.5%	-0.2%	-0.09%
x Os Mal.	0	0	0	0	0	3	3	3	2.0%	2	1.5%	0.5%	0.25%
x Talus	0	0	3	0	1	1	5	5	3.4%	2	1.5%	1.8%	0.92%
x Calcan.	1	0	0	0	0	1	2	2	1.3%	2	1.5%	-0.2%	-0.09%
x Tarsal	1	0	0	0	0	2	3	3	2.0%	3	2.3%	-0.3%	-0.09%
x p.Mt.	0	0	1	0	0	1	2	2	1.7%	2	1.5%	0.2%	0.08%
s.Mt.	1	0	2	0	0	1	4						
x d.Mt.	1	0	0	0	0	0	1	1	1.3%	2	1.5%	-0.2%	-0.09%
x p.Mp.	1	0	0	0	0	0	1	1					
s.Mp.	3	0	0	0	1	0	4						
x d.Mp.	0	0	2	0	0	0	2	2					
Sesam.	0	0	0	0	0	0	0						
x Ph.1	8	0	11	1	0	4	24	24	16.1%	8	6.1%	10.0%	1.26%
x Ph.2	4	0	5	1	1	4	15	15	10.1%	8	6.1%	4.0%	0.50%
x Ph.3	0	0	1	0	0	1	2	2	1.3%	8	6.1%	-4.7%	-0.59%
Shaft	41	1	70	9	10	56	187						
Frags.	20	4	23	0	6	32	85						
Other	1	0	0	0	1	11	13						
TOTAL	121	8	158	18	26	196	527 527	149	100.0%	132	100.0%	0.0%	-2.54%

Table 8.20-2

LARGE MAMMAL 5 TOTALS	5C TOT.	5C/B OUT	5B TOT.	5C/A RUB.	5B/A OFI	5A TOT.	TOT.	x-TOT	x%	STAN-DARD	S%	x%-S%	(x%-S%)/S
x Horncore	0	0	0	0	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Atl/Axis	0	0	0	0	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Sacrum	0	0	0	0	0	0	0	0	0.0%	1	0.8%	-0.8%	-0.76%
x p.Hum.	0	0	0	0	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x d.Rad.	0	0	0	0	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Femur	0	0	0	0	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Tibia	0	0	0	0	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Ph.3	0	0	1	0	0	1	2	2	1.3%	8	6.1%	-4.7%	-0.59%
x Vert.	4	0	0	0	0	4	8	8	5.4%	25	18.9%	-13.6%	-0.54%
x d.Scap.	1	0	0	0	0	0	1	1	0.7%	2	1.5%	-0.8%	-0.42%
x p.Rad.	1	0	0	0	0	0	1	1	0.7%	2	1.5%	-0.8%	-0.42%
x p.Ulna	1	0	0	0	0	0	1	1	0.7%	2	1.5%	-0.8%	-0.42%
x d.Mc.	0	0	0	0	0	0	0	0	0.7%	2	1.5%	-0.8%	-0.42%
x d.Femur	0	0	0	0	0	1	1	1	0.7%	2	1.5%	-0.8%	-0.42%
x Patella	0	0	0	0	0	1	1	1	0.7%	2	1.5%	-0.8%	-0.42%
x Carpal	0	0	1	0	0	2	3	3	2.0%	6	4.5%	-2.5%	-0.42%
x Tarsal	1	0	0	0	0	2	3	3	2.0%	3	2.3%	-0.3%	-0.09%
x Max/Tth	0	0	0	0	0	0	0	0	1.3%	2	1.5%	-0.2%	-0.09%
x d.Hum.	1	0	1	0	0	0	2	2	1.3%	2	1.5%	-0.2%	-0.09%
x d.Tibia	0	0	0	0	0	2	2	2	1.3%	2	1.5%	-0.2%	-0.09%
x Calcan.	1	0	0	0	0	1	2	2	1.3%	2	1.5%	-0.2%	-0.09%
x d.Mt.	1	0	0	0	0	0	1	1	1.3%	2	1.5%	-0.2%	-0.09%
x p.Mc.	1	0	0	0	0	1	2	2	1.7%	2	1.5%	0.2%	0.08%
x p.Mt.	0	0	1	0	0	1	2	2	1.7%	2	1.5%	0.2%	0.08%
x Os Mal.	0	0	0	0	0	3	3	3	2.0%	2	1.5%	0.5%	0.25%
x Ph.2	4	0	5	1	1	4	15	15	10.1%	8	6.1%	4.0%	0.50%
x Ribs	9	3	7	2	4	24	49	49	32.9%	26	19.7%	13.2%	0.51%
x Occiput	0	0	2	0	0	0	2	2	1.3%	1	0.8%	0.6%	0.58%
x Talus	0	0	3	0	1	1	5	5	3.4%	2	1.5%	1.8%	0.92%
x Man/Tth	1	0	0	0	0	1	2	2	4.0%	2	1.5%	2.5%	1.26%
x Ph.1	8	0	11	1	0	4	24	24	16.1%	8	6.1%	10.0%	1.26%
x Acetab.	0	0	3	0	0	5	8	8	5.4%	2	1.5%	3.9%	1.93%

Table 8.21

Table 8.22-1

MEDIUM MAMMAL 4C2 SCREENED	EXTER.	INTER.	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Horncore	15	3	18	18	2.1%	2	1.5%	0.6%	0.28%
x Occiput	1	1	2	2	0.2%	1	0.8%	-0.5%	-0.53%
Skull	54	8	62						
x Max/Tth	11	3	14	14	3.0%	2	1.5%	1.5%	0.74%
Maxil.	3	1	4						
x Man/Tth	15	5	20	20	3.1%	2	1.5%	1.6%	0.80%
Mandib.	59	12	71						
x up. D3/M3	10	2	12	12					
x lw. D3/M3	5	2	7	7					
Teeth	66	15	81						
Hyoid	0	0	0						
x Atl/Axis	10	2	12	12	1.4%	2	1.5%	-0.1%	-0.07%
x Vert.	91	34	125	125	14.4%	25	18.9%	-4.5%	-0.18%
x Sacrum	4	2	6	6	0.7%	1	0.8%	-0.1%	-0.07%
x Ribs	167	60	227	227	26.2%	26	19.7%	6.5%	0.25%
Cst/Str	3	0	3						
x d.Scap.	9	1	10	10	1.2%	2	1.5%	-0.4%	-0.18%
Scapula	36	10	46						
x p.Hum.	7	2	9	9	1.0%	2	1.5%	-0.5%	-0.24%
s.Hum.	31	5	36						
x d.Hum.	30	8	38	38	4.4%	2	1.5%	2.9%	1.43%
x p.Rad.	13	11	24	24	2.8%	2	1.5%	1.2%	0.62%
s.Rad.	51	17	68						
x d.Rad.	15	5	20	20	2.3%	2	1.5%	0.8%	0.39%
x p.Ulna	7	4	11	11	1.3%	2	1.5%	-0.2%	-0.12%
s.Ulna	32	10	42						
d.Ulna	0	1	1						
x Carpal	10	8	18	18	2.1%	6	4.5%	-2.5%	-0.41%
x p.Mc.	7	2	9	9	1.2%	2	1.5%	-0.3%	-0.15%
s.Mc.	6	0	6						
x d.Mc.	6	2	8	8	1.3%	2	1.5%	-0.2%	-0.12%

Table 8.22-2

x	Acetab.	24	4	28	28	3.2%	2	1.5%	1.7%	0.86%
	Pelvis	13	8	21						
x	p.Femur	34	9	43	43	5.0%	2	1.5%	3.4%	1.72%
	s.Femur	42	4	46						
x	d.Femur	17	4	21	21	2.4%	2	1.5%	0.9%	0.45%
x	Patella	4	3	7	7	0.8%	2	1.5%	-0.7%	-0.35%
x	p.Tibia	12	5	17	17	2.0%	2	1.5%	0.4%	0.22%
	s.Tibia	42	10	52						
x	d.Tibia	22	7	29	29	3.3%	2	1.5%	1.8%	0.91%
x	Os Mal.	1	1	2	2	0.2%	2	1.5%	-1.3%	-0.64%
x	Talus	16	1	17	17	2.0%	2	1.5%	0.4%	0.22%
x	Calcan.	13	5	18	18	2.1%	2	1.5%	0.6%	0.28%
x	Tarsal	5	3	8	8	0.9%	3	2.3%	-1.4%	-0.45%
x	p.Mt.	6	3	9	9	1.2%	2	1.5%	-0.3%	-0.15%
	s.Mt.	2	0	2						
x	d.Mt.	3	4	7	7	1.2%	2	1.5%	-0.4%	-0.18%
x	p.Mp.	3	0	3	3					
	s.Mp.	5	2	7						
x	d.Mp.	6	0	6	6					
	Sesam.	0	0	0						
x	Ph.1	20	4	24	24	2.8%	8	6.1%	-3.3%	-0.41%
x	Ph.2	14	10	24	24	2.8%	8	6.1%	-3.3%	-0.41%
x	Ph.3	12	3	15	15	1.7%	8	6.1%	-4.3%	-0.54%
	Shaft	723	186	909						
	Frags.	198	124	322						
	Other	24	16	40						
	TOTAL	2035	652	2687 2687	868	100.0%	132	100.0%	0.0%	3.96%

Table 8.23

MEDIUM MAMMAL 4C2 SCREENED	EXTER.	INTER.	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Os Mal.	1	1	2	2	0.2%	2	1.5%	-1.3%	-0.64%
x Ph.3	12	3	15	15	1.7%	8	6.1%	-4.3%	-0.54%
x Occiput	1	1	2	2	0.2%	1	0.8%	-0.5%	-0.53%
x Tarsal	5	3	8	8	0.9%	3	2.3%	-1.4%	-0.45%
x Ph.1	20	4	24	24	2.8%	8	6.1%	-3.3%	-0.41%
x Ph.2	14	10	24	24	2.8%	8	6.1%	-3.3%	-0.41%
x Carpal	10	8	18	18	2.1%	6	4.5%	-2.5%	-0.41%
x Patella	4	3	7	7	0.8%	2	1.5%	-0.7%	-0.35%
x p.Hum.	7	2	9	9	1.0%	2	1.5%	-0.5%	-0.24%
x d.Scap.	9	1	10	10	1.2%	2	1.5%	-0.4%	-0.18%
x d.Mt.	3	4	7	7	1.2%	2	1.5%	-0.4%	-0.18%
x Vert.	91	34	125	125	14.4%	25	18.9%	-4.5%	-0.18%
x p.Mc.	7	2	9	9	1.2%	2	1.5%	-0.3%	-0.15%
x p.Mt.	6	3	9	9	1.2%	2	1.5%	-0.3%	-0.15%
x p.Ulna	7	4	11	11	1.3%	2	1.5%	-0.2%	-0.12%
x d.Mc.	6	2	8	8	1.3%	2	1.5%	-0.2%	-0.12%
x Atl/Axis	10	2	12	12	1.4%	2	1.5%	-0.1%	-0.07%
x Sacrum	4	2	6	6	0.7%	1	0.8%	-0.1%	-0.07%
x p.Tibia	12	5	17	17	2.0%	2	1.5%	0.4%	0.22%
x Talus	16	1	17	17	2.0%	2	1.5%	0.4%	0.22%
x Ribs	167	60	227	227	26.2%	26	19.7%	6.5%	0.25%
x Horncore	15	3	18	18	2.1%	2	1.5%	0.6%	0.28%
x Calcan.	13	5	18	18	2.1%	2	1.5%	0.6%	0.28%
x d.Rad.	15	5	20	20	2.3%	2	1.5%	0.8%	0.39%
x d.Femur	17	4	21	21	2.4%	2	1.5%	0.9%	0.45%
x p.Rad.	13	11	24	24	2.8%	2	1.5%	1.2%	0.62%
x Max/Tth	11	3	14	14	3.0%	2	1.5%	1.5%	0.74%
x Man/Tth	15	5	20	20	3.1%	2	1.5%	1.6%	0.80%
x Acetab.	24	4	28	28	3.2%	2	1.5%	1.7%	0.86%
x d.Tibia	22	7	29	29	3.3%	2	1.5%	1.8%	0.91%
x d.Hum.	30	8	38	38	4.4%	2	1.5%	2.9%	1.43%
x p.Femur	34	9	43	43	5.0%	2	1.5%	3.4%	1.72%

Table 8.24-1

LARGE MAMMAL 4C2 SCREENED	EXTER.	INTER.	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Horncore	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Occiput	0	0	0	0	0.0%	1	0.8%	-0.8%	-0.76%
Skull	1	0	1						
x Max/Tth	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
Maxil.	0	0	0						
x Man/Tth	1	1	2	2	3.1%	2	1.5%	1.6%	0.78%
Mandib.	2	1	3						
x up. D3/M3	0	0	0	0					
x lw. D3/M3	0	0	0	0					
Teeth	0	0	0						
Hyoid	0	0	0						
x Atl/Axis	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Vert.	9	4	13	13	20.0%	25	18.9%	1.1%	0.04%
x Sacrum	0	0	0	0	0.0%	1	0.8%	-0.8%	-0.76%
x Ribs	19	3	22	22	33.8%	26	19.7%	14.1%	0.54%
Cst/Str	0	0	0						
x d.Scap.	0	2	2	2	3.1%	2	1.5%	1.6%	0.78%
Scapula	0	2	2						
x p.Hum.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
s.Hum.	1	3	4						
x d.Hum.	0	4	4	4	6.2%	2	1.5%	4.6%	2.32%
x p.Rad.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
s.Rad.	0	0	0						
x d.Rad.	2	1	3	3	4.6%	2	1.5%	3.1%	1.55%
x p.Ulna	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
s.Ulna	0	0	0						
d.Ulna	0	0	0						
x Carpal	0	1	1	1	1.5%	6	4.5%	-3.0%	-0.50%
x p.Mc.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
s.Mc.	0	0	0						
x d.Mc.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%

Table 8.24-2

x Acetab.	1	0	1	1	1.5%	2	1.5%	0.0%	0.01%
Pelvis	3	1	4						
x p.Femur	1	0	1	1	1.5%	2	1.5%	0.0%	0.01%
s.Femur	0	0	0						
x d.Femur	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Patella	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Tibia	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
s.Tibia	0	0	0						
x d.Tibia	1	2	3	3	4.6%	2	1.5%	3.1%	1.55%
x Os Mal.	1	0	1	1	1.5%	2	1.5%	0.0%	0.01%
x Talus	1	1	2	2	3.1%	2	1.5%	1.6%	0.78%
x Calcan.	0	1	1	1	1.5%	2	1.5%	0.0%	0.01%
x Tarsal	1	0	1	1	1.5%	3	2.3%	-0.7%	-0.24%
x p.Mt.	0	1	1	1	1.5%	2	1.5%	0.0%	0.01%
s.Mt.	0	0	0						
x d.Mt.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Mp.	0	0	0	0					
s.Mp.	0	0	0						
x d.Mp.	0	0	0	0					
Sesam.	1	0	1						
x Ph.1	1	1	2	2	3.1%	8	6.1%	-3.0%	-0.37%
x Ph.2	2	2	4	4	6.2%	8	6.1%	0.1%	0.01%
x Ph.3	1	0	1	1	1.5%	8	6.1%	-4.5%	-0.57%
Shaft	29	12	41						
Frags.	34	22	56						
Other	7	0	7						
TOTAL	119	65	184 184	65	100.0%	132	100.0%	0.0%	-3.87%

Table 8.25

LARGE MAMMAL 4C2 SCREENED	EXTER.	INTER.	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Horncore	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Occiput	0	0	0	0	0.0%	1	0.8%	-0.8%	-0.76%
x Max/Tth	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Atl/Axis	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Sacrum	0	0	0	0	0.0%	1	0.8%	-0.8%	-0.76%
x p.Hum.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Rad.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Ulna	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Mc.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x d.Mc.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x d.Femur	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Patella	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Tibia	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x d.Mt.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Ph.3	1	0	1	1	1.5%	8	6.1%	-4.5%	-0.57%
x Carpal	0	1	1	1	1.5%	6	4.5%	-3.0%	-0.50%
x Ph.1	1	1	2	2	3.1%	8	6.1%	-3.0%	-0.37%
x Tarsal	1	0	1	1	1.5%	3	2.3%	-0.7%	-0.24%
x Acetab.	1	0	1	1	1.5%	2	1.5%	0.0%	0.01%
x p.Femur	1	0	1	1	1.5%	2	1.5%	0.0%	0.01%
x Os Mal.	1	0	1	1	1.5%	2	1.5%	0.0%	0.01%
x Calcan.	0	1	1	1	1.5%	2	1.5%	0.0%	0.01%
x p.Mt.	0	1	1	1	1.5%	2	1.5%	0.0%	0.01%
x Ph.2	2	2	4	4	6.2%	8	6.1%	0.1%	0.01%
x Vert.	9	4	13	13	20.0%	25	18.9%	1.1%	0.04%
x Ribs	19	3	22	22	33.8%	26	19.7%	14.1%	0.54%
x Man/Tth	1	1	2	2	3.1%	2	1.5%	1.6%	0.78%
x d.Scap.	0	2	2	2	3.1%	2	1.5%	1.6%	0.78%
x Talus	1	1	2	2	3.1%	2	1.5%	1.6%	0.78%
x d.Rad.	2	1	3	3	4.6%	2	1.5%	3.1%	1.55%
x d.Tibia	1	2	3	3	4.6%	2	1.5%	3.1%	1.55%
x d.Hum.	0	4	4	4	6.2%	2	1.5%	4.6%	2.32%

Table 8.26-1

MEDIUM MAMMAL 4C2 NOT SCRN.	EXTER.	INTER.	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Horncore	10	4	14	14	3.2%	2	1.5%	1.7%	0.85%
x Occiput	1	0	1	1	0.2%	1	0.8%	-0.5%	-0.53%
Skull	6	4	10						
x Max/Tth	4	5	9	9	3.2%	2	1.5%	1.7%	0.85%
Maxil.	0	0	0						
x Man/Tth	9	9	18	18	4.6%	2	1.5%	3.1%	1.54%
Mandib.	7	2	9						
x up. D3/M3	3	2	5	5					
x lw. D3/M3	2	0	2	2					
Teeth	12	8	20						
Hyoid	0	0	0						
x Atl/Axis	3	2	5	5	1.1%	2	1.5%	-0.4%	-0.18%
x Vert.	30	33	63	63	14.4%	25	18.9%	-4.5%	-0.18%
x Sacrum	0	1	1	1	0.2%	1	0.8%	-0.5%	-0.53%
x Ribs	22	46	68	68	15.6%	26	19.7%	-4.1%	-0.16%
Cst/Str	0	0	0						
x d.Scap.	4	5	9	9	2.1%	2	1.5%	0.5%	0.27%
Scapula	14	13	27						
x p.Hum.	3	3	6	6	1.4%	2	1.5%	-0.1%	-0.07%
s.Hum.	13	15	28						
x d.Hum.	27	11	38	38	8.7%	2	1.5%	7.2%	3.60%
x p.Rad.	6	12	18	18	4.1%	2	1.5%	2.6%	1.31%
s.Rad.	24	22	46						
x d.Rad.	8	6	14	14	3.2%	2	1.5%	1.7%	0.85%
x p.Ulna	3	5	8	8	1.8%	2	1.5%	0.3%	0.16%
s.Ulna	13	15	28						
d.Ulna	0	1	1						
x Carpal	0	5	5	5	1.1%	6	4.5%	-3.4%	-0.57%
x p.Mc.	3	2	5	5	1.1%	2	1.5%	-0.4%	-0.18%
s.Mc.	4	0	4						
x d.Mc.	2	0	2	2	0.5%	2	1.5%	-1.1%	-0.53%

Table 8.26-2

x	Acetab.	11	9	20	20	4.6%	2	1.5%	3.1%	1.54%
	Pelvis	3	6	9						
x	p.Femur	20	9	29	29	6.7%	2	1.5%	5.1%	2.57%
	s.Femur	15	7	22						
x	d.Femur	9	5	14	14	3.2%	2	1.5%	1.7%	0.85%
x	Patella	0	3	3	3	0.7%	2	1.5%	-0.8%	-0.41%
x	p.Tibia	9	7	16	16	3.7%	2	1.5%	2.2%	1.08%
	s.Tibia	22	17	39						
x	d.Tibia	14	7	21	21	4.8%	2	1.5%	3.3%	1.65%
x	Os Mal.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x	Talus	5	0	5	5	1.1%	2	1.5%	-0.4%	-0.18%
x	Calcan.	4	3	7	7	1.6%	2	1.5%	0.1%	0.05%
x	Tarsal	0	3	3	3	0.7%	3	2.3%	-1.6%	-0.53%
x	p.Mt.	2	5	7	7	1.6%	2	1.5%	0.1%	0.05%
	s.Mt.	1	1	2						
x	d.Mt.	2	5	7	7	1.6%	2	1.5%	0.1%	0.05%
x	p.Mp.	0	0	0	0					
	s.Mp.	1	2	3						
x	d.Mp.	0	0	0	0					
	Sesam.	0	0	0						
x	Ph.1	5	4	9	9	2.1%	8	6.1%	-4.0%	-0.50%
x	Ph.2	1	3	4	4	0.9%	8	6.1%	-5.1%	-0.64%
x	Ph.3	0	0	0	0	0.0%	8	6.1%	-6.1%	-0.76%
	Shaft	100	84	184						
	Frags.	5	17	22						
	Other	1	7	8						
	TOTAL	463	435	898 898	436	100.0%	132	100.0%	0.0%	10.53%

Table 8.27

MEDIUM MAMMAL 4C2 NOT SCRN.	EXTER.	INTER.	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Ph.3	0	0	0	0	0.0%	8	6.1%	-6.1%	-0.76%
x Os Mal.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Ph.2	1	3	4	4	0.9%	8	6.1%	-5.1%	-0.64%
x Carpal	0	5	5	5	1.1%	6	4.5%	-3.4%	-0.57%
x Tarsal	0	3	3	3	0.7%	3	2.3%	-1.6%	-0.53%
x d.Mc.	2	0	2	2	0.5%	2	1.5%	-1.1%	-0.53%
x Occiput	1	0	1	1	0.2%	1	0.8%	-0.5%	-0.53%
x Sacrum	0	1	1	1	0.2%	1	0.8%	-0.5%	-0.53%
x Ph.1	5	4	9	9	2.1%	8	6.1%	-4.0%	-0.50%
x Patella	0	3	3	3	0.7%	2	1.5%	-0.8%	-0.41%
x Atl/Axis	3	2	5	5	1.1%	2	1.5%	-0.4%	-0.18%
x p.Mc.	3	2	5	5	1.1%	2	1.5%	-0.4%	-0.18%
x Talus	5	0	5	5	1.1%	2	1.5%	-0.4%	-0.18%
x Vert.	30	33	63	63	14.4%	25	18.9%	-4.5%	-0.18%
x Ribs	22	46	68	68	15.6%	26	19.7%	-4.1%	-0.16%
x p.Hum.	3	3	6	6	1.4%	2	1.5%	-0.1%	-0.07%
x Calcan.	4	3	7	7	1.6%	2	1.5%	0.1%	0.05%
x p.Mt.	2	5	7	7	1.6%	2	1.5%	0.1%	0.05%
x d.Mt.	2	5	7	7	1.6%	2	1.5%	0.1%	0.05%
x p.Ulna	3	5	8	8	1.8%	2	1.5%	0.3%	0.16%
x d.Scap.	4	5	9	9	2.1%	2	1.5%	0.5%	0.27%
x Horncore	10	4	14	14	3.2%	2	1.5%	1.7%	0.85%
x Max/Tth	4	5	9	9	3.2%	2	1.5%	1.7%	0.85%
x d.Rad.	8	6	14	14	3.2%	2	1.5%	1.7%	0.85%
x d.Femur	9	5	14	14	3.2%	2	1.5%	1.7%	0.85%
x p.Tibia	9	7	16	16	3.7%	2	1.5%	2.2%	1.08%
x p.Rad.	6	12	18	18	4.1%	2	1.5%	2.6%	1.31%
x Man/Tth	9	9	18	18	4.6%	2	1.5%	3.1%	1.54%
x Acetab.	11	9	20	20	4.6%	2	1.5%	3.1%	1.54%
x d.Tibia	14	7	21	21	4.8%	2	1.5%	3.3%	1.65%
x p.Femur	20	9	29	29	6.7%	2	1.5%	5.1%	2.57%
x d.Hum.	27	11	38	38	8.7%	2	1.5%	7.2%	3.60%

LARGE MAMMAL 4C2 NOT SCRN.	EXTER.	INTER.	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Horncore	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Occiput	0	0	0	0	0.0%	1	0.8%	-0.8%	-0.76%
Skull	2	3	5						
x Max/Tth	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
Maxil.	0	0	0						
x Man/Tth	2	1	3	3	6.3%	2	1.5%	4.7%	2.37%
Mandib.	1	0	1						
x up. D3/M3	0	0	0	0					
x lw. D3/M3	0	0	0	0					
Teeth	1	0	1						
Hyoid	0	0	0						
x Atl/Axis	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Vert.	2	1	3	3	6.3%	25	18.9%	-12.7%	-0.51%
x Sacrum	0	0	0	0	0.0%	1	0.8%	-0.8%	-0.76%
x Ribs	12	3	15	15	31.3%	26	19.7%	11.6%	0.44%
Cst/Str	0	0	0						
x d.Scap.	0	2	2	2	4.2%	2	1.5%	2.7%	1.33%
Scapula	0	3	3						
x p.Hum.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
s.Hum.	2	3	5						
x d.Hum.	0	4	4	4	8.3%	2	1.5%	6.8%	3.41%
x p.Rad.	0	1	1	1	2.1%	2	1.5%	0.6%	0.28%
s.Rad.	0	0	0						
x d.Rad.	1	1	2	2	4.2%	2	1.5%	2.7%	1.33%
x p.Ulna	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
s.Ulna	0	0	0						
d.Ulna	0	0	0						
x Carpal	0	1	1	1	2.1%	6	4.5%	-2.5%	-0.41%
x p.Mc.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
s.Mc.	0	0	0						
x d.Mc.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%

Table 8.28-1

Table 8.28-2

x Acetab.	1	0	1	1	2.1%	2	1.5%	0.6%	0.28%
Pelvis	3	1	4						
x p.Femur	2	0	2	2	4.2%	2	1.5%	2.7%	1.33%
s.Femur	0	0	0						
x d.Femur	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Patella	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Tibia	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
s.Tibia	1	0	1						
x d.Tibia	1	2	3	3	6.3%	2	1.5%	4.7%	2.37%
x Os Mal.	1	0	1	1	2.1%	2	1.5%	0.6%	0.28%
x Talus	1	2	3	3	6.3%	2	1.5%	4.7%	2.37%
x Calcan.	0	1	1	1	2.1%	2	1.5%	0.6%	0.28%
x Tarsal	1	0	1	1	2.1%	3	2.3%	-0.2%	-0.06%
x p.Mt.	0	1	1	1	2.1%	2	1.5%	0.6%	0.28%
s.Mt.	0	0	0						
x d.Mt.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Mp.	0	0	0	0					
s.Mp.	0	0	0						
x d.Mp.	0	0	0	0					
Sesam.	0	0	0						
x Ph.1	1	0	1	1	2.1%	8	6.1%	-4.0%	-0.50%
x Ph.2	0	2	2	2	4.2%	8	6.1%	-1.9%	-0.24%
x Ph.3	1	0	1	1	2.1%	8	6.1%	-4.0%	-0.50%
Shaft	12	16	28						
Frags.	13	13	26						
Other	1	0	1						
TOTAL	62	61	123 123	48	100.0%	132	100.0%	0.0%	4.29%

Table 8.29

LARGE MAMMAL 4C2 NOT SCRN.	EXTER.	INTER.	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Horncore	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Occiput	0	0	0	0	0.0%	1	0.8%	-0.8%	-0.76%
x Max/Tth	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Atl/Axis	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Sacrum	0	0	0	0	0.0%	1	0.8%	-0.8%	-0.76%
x p.Hum.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Ulna	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Mc.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x d.Mc.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x d.Femur	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Patella	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Tibia	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x d.Mt.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Vert.	2	1	3	3	6.3%	25	18.9%	-12.7%	-0.51%
x Ph.1	1	0	1	1	2.1%	8	6.1%	-4.0%	-0.50%
x Ph.3	1	0	1	1	2.1%	8	6.1%	-4.0%	-0.50%
x Carpal	0	1	1	1	2.1%	6	4.5%	-2.5%	-0.41%
x Ph.2	0	2	2	2	4.2%	8	6.1%	-1.9%	-0.24%
x Tarsal	1	0	1	1	2.1%	3	2.3%	-0.2%	-0.06%
x p.Rad.	0	1	1	1	2.1%	2	1.5%	0.6%	0.28%
x Acetab.	1	0	1	1	2.1%	2	1.5%	0.6%	0.28%
x Os Mal.	1	0	1	1	2.1%	2	1.5%	0.6%	0.28%
x Calcan.	0	1	1	1	2.1%	2	1.5%	0.6%	0.28%
x p.Mt.	0	1	1	1	2.1%	2	1.5%	0.6%	0.28%
x Ribs	12	3	15	15	31.3%	26	19.7%	11.6%	0.44%
x d.Scap.	0	2	2	2	4.2%	2	1.5%	2.7%	1.33%
x d.Rad.	1	1	2	2	4.2%	2	1.5%	2.7%	1.33%
x p.Femur	2	0	2	2	4.2%	2	1.5%	2.7%	1.33%
x Man/Tth	2	1	3	3	6.3%	2	1.5%	4.7%	2.37%
x d.Tibia	1	2	3	3	6.3%	2	1.5%	4.7%	2.37%
x Talus	1	2	3	3	6.3%	2	1.5%	4.7%	2.37%
x d.Hum.	0	4	4	4	8.3%	2	1.5%	6.8%	3.41%

Table 8.30-1

MEDIUM MAMMAL 4C1 SCREENED	E.SIDE SCRN.	E.SIDE NOT SC.	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Horncore		1	1	1	0.4%	2	1.5%	-1.1%	-0.54%
x Occiput			0	0	0.0%	1	0.8%	-0.8%	-0.76%
Skull	14	1	15						
x Max/Tth	3		3	3	3.5%	2	1.5%	2.0%	1.00%
Maxil.	2		2						
x Man/Tth	4	3	7	7	4.8%	2	1.5%	3.3%	1.67%
Mandib.	13	11	24						
x up. D3/M3	4	1	5	5					
x lw. D3/M3	3	1	4	4					
Teeth	14	5	19						
Hyoid		1	1						
x Atl/Axis	3	1	4	4	1.8%	2	1.5%	0.2%	0.12%
x Vert.	35	8	43	43	18.9%	25	18.9%	0.0%	0.00%
x Sacrum	1		1	1	0.4%	1	0.8%	-0.3%	-0.32%
x Ribs	37	17	54	54	23.8%	26	19.7%	4.1%	0.16%
Cst/Str	2		2						
x d.Scap.	2	1	3	3	1.3%	2	1.5%	-0.2%	-0.10%
Scapula	5		5						
x p.Hum.	1		1	1	0.4%	2	1.5%	-1.1%	-0.54%
s.Hum.	4	4	8						
x d.Hum.	1	3	4	4	1.8%	2	1.5%	0.2%	0.12%
x p.Rad.	3	1	4	4	1.8%	2	1.5%	0.2%	0.12%
s.Rad.	8		8						
x d.Rad.	1	1	2	2	0.9%	2	1.5%	-0.6%	-0.32%
x p.Ulna	1		1	1	0.4%	2	1.5%	-1.1%	-0.54%
s.Ulna	11	3	14						
d.Ulna			0						
x Carpal	3		3	3	1.3%	6	4.5%	-3.2%	-0.54%
x p.Mc.		1	1	1	0.4%	2	1.5%	-1.1%	-0.54%
s.Mc.			0						
x d.Mc.	1	1	2	2	1.3%	2	1.5%	-0.2%	-0.10%

Table 8.30-2

x	Acetab.	11	2	13	13	5.7%	2	1.5%	4.2%	2.11%
	Pelvis	3		3						
x	p.Femur	4	1	5	5	2.2%	2	1.5%	0.7%	0.34%
	s.Femur	2	1	3						
x	d.Femur	3	3	6	6	2.6%	2	1.5%	1.1%	0.56%
x	Patella	2		2	2	0.9%	2	1.5%	-0.6%	-0.32%
x	p.Tibia	2	1	3	3	1.3%	2	1.5%	-0.2%	-0.10%
	s.Tibia	6	2	8						
x	d.Tibia	3	3	6	6	2.6%	2	1.5%	1.1%	0.56%
x	Os Mal.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x	Talus	5	2	7	7	3.1%	2	1.5%	1.6%	0.78%
x	Calcan.	5	5	10	10	4.4%	2	1.5%	2.9%	1.45%
x	Tarsal	2	2	4	4	1.8%	3	2.3%	-0.5%	-0.17%
x	p.Mt.	1		1	1	0.4%	2	1.5%	-1.1%	-0.54%
	s.Mt.	2		2						
x	d.Mt.			0	0	0.4%	2	1.5%	-1.1%	-0.54%
x	p.Mp.			0	0					
	s.Mp.			0						
x	d.Mp.	2		2	2					
	Sesam.			0						
x	Ph.1	12	4	16	16	7.0%	8	6.1%	1.0%	0.12%
x	Ph.2	4	1	5	5	2.2%	8	6.1%	-3.9%	-0.48%
x	Ph.3	4		4	4	1.8%	8	6.1%	-4.3%	-0.54%
	Shaft	305	54	359						
	Frags.	23	26	49						
	Other		4	4						
	TOTAL	577	176	753 753	227	100.0%	132	100.0%	0.0%	1.42%

Table 8.31

MEDIUM MAMMAL 4C1 SCREENED	E.SIDE SCRN.	E.SIDE NOT SC.	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Occiput			0	0	0.0%	1	0.8%	-0.8%	-0.76%
x Os Mal.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Horncore		1	1	1	0.4%	2	1.5%	-1.1%	-0.54%
x p.Hum.	1		1	1	0.4%	2	1.5%	-1.1%	-0.54%
x p.Ulna	1		1	1	0.4%	2	1.5%	-1.1%	-0.54%
x p.Mc.		1	1	1	0.4%	2	1.5%	-1.1%	-0.54%
x p.Mt.	1		1	1	0.4%	2	1.5%	-1.1%	-0.54%
x d.Mt.			0	0	0.4%	2	1.5%	-1.1%	-0.54%
x Ph.3	4		4	4	1.8%	8	6.1%	-4.3%	-0.54%
x Carpal	3		3	3	1.3%	6	4.5%	-3.2%	-0.54%
x Ph.2	4	1	5	5	2.2%	8	6.1%	-3.9%	-0.48%
x d.Rad.	1	1	2	2	0.9%	2	1.5%	-0.6%	-0.32%
x Patella	2		2	2	0.9%	2	1.5%	-0.6%	-0.32%
x Sacrum	1		1	1	0.4%	1	0.8%	-0.3%	-0.32%
x Tarsal	2	2	4	4	1.8%	3	2.3%	-0.5%	-0.17%
x d.Scap.	2	1	3	3	1.3%	2	1.5%	-0.2%	-0.10%
x d.Mc.	1	1	2	2	1.3%	2	1.5%	-0.2%	-0.10%
x p.Tibia	2	1	3	3	1.3%	2	1.5%	-0.2%	-0.10%
x Vert.	35	8	43	43	18.9%	25	18.9%	0.0%	0.00%
x Atl/Axis	3	1	4	4	1.8%	2	1.5%	0.2%	0.12%
x d.Hum.	1	3	4	4	1.8%	2	1.5%	0.2%	0.12%
x p.Rad.	3	1	4	4	1.8%	2	1.5%	0.2%	0.12%
x Ph.1	12	4	16	16	7.0%	8	6.1%	1.0%	0.12%
x Ribs	37	17	54	54	23.8%	26	19.7%	4.1%	0.16%
x p.Femur	4	1	5	5	2.2%	2	1.5%	0.7%	0.34%
x d.Femur	3	3	6	6	2.6%	2	1.5%	1.1%	0.56%
x d.Tibia	3	3	6	6	2.6%	2	1.5%	1.1%	0.56%
x Talus	5	2	7	7	3.1%	2	1.5%	1.6%	0.78%
x Max/Tth	3		3	3	3.5%	2	1.5%	2.0%	1.00%
x Calcan.	5	5	10	10	4.4%	2	1.5%	2.9%	1.45%
x Man/Tth	4	3	7	7	4.8%	2	1.5%	3.3%	1.67%
x Acetab.	11	2	13	13	5.7%	2	1.5%	4.2%	2.11%

LARGE MAMMAL 4C1 SCREENED	E.SIDE SCRN.	E.SIDE NOT SC.	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Horncore			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Occiput			0	0	0.0%	1	0.8%	-0.8%	-0.76%
Skull			0						
x Max/Tth			0	0	0.0%	2	1.5%	-1.5%	-0.76%
Maxil.			0						
x Man/Tth			0	0	0.0%	2	1.5%	-1.5%	-0.76%
Mandib.			0						
x up. D3/M3			0	0					
x lw. D3/M3			0	0					
Teeth	1	1	2						
Hyoid			0						
x Atl/Axis			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Vert.	1	1	2	2	22.2%	25	18.9%	3.3%	0.13%
x Sacrum			0	0	0.0%	1	0.8%	-0.8%	-0.76%
x Ribs	3		3	3	33.3%	26	19.7%	13.6%	0.52%
Cst/Str			0						
x d.Scap.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
Scapula			0						
x p.Hum.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
s.Hum.			0						
x d.Hum.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Rad.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
s.Rad.			0						
x d.Rad.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Ulna			0	0	0.0%	2	1.5%	-1.5%	-0.76%
s.Ulna		1	1						
d.Ulna			0						
x Carpal			0	0	0.0%	6	4.5%	-4.5%	-0.76%
x p.Mc.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
s.Mc.			0						
x d.Mc.			0	0	0.0%	2	1.5%	-1.5%	-0.76%

Table 8.32-1

Table 8.32-2

x	Acetab.		1	1	1	11.1%	2	1.5%	9.6%	4.80%
	Pelvis			0						
x	p.Femur		2	2	2	22.2%	2	1.5%	20.7%	10.35%
	s.Femur			0						
x	d.Femur			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x	Patella			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x	p.Tibia			0	0	0.0%	2	1.5%	-1.5%	-0.76%
	s.Tibia			0						
x	d.Tibia			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x	Os Mal.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x	Talus			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x	Calcan.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x	Tarsal			0	0	0.0%	3	2.3%	-2.3%	-0.76%
x	p.Mt.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
	s.Mt.			0						
x	d.Mt.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x	p.Mp.			0	0					
	s.Mp.			0						
x	d.Mp.			0	0					
	Sesam.			0						
x	Ph.1			0	0	0.0%	8	6.1%	-6.1%	-0.76%
x	Ph.2		1	1	1	11.1%	8	6.1%	5.1%	0.63%
x	Ph.3			0	0	0.0%	8	6.1%	-6.1%	-0.76%
	Shaft	9	4	13						
	Frags.	12		12						
	Other	1		1						
	TOTAL	27	11	38	9	100.0%	132	100.0%	0.0%	-4.02%
				38						

LARGE MAMMAL 4C1 SCREENED	E.SIDE SCRN.	E.SIDE NOT SC.	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Tarsal			0	0	0.0%	3	2.3%	-2.3%	-0.76%
x Ph.1			0	0	0.0%	8	6.1%	-6.1%	-0.76%
x Ph.3			0	0	0.0%	8	6.1%	-6.1%	-0.76%
x Horncore			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Occiput			0	0	0.0%	1	0.8%	-0.8%	-0.76%
x Max/Tth			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Man/Tth			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Atl/Axis			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Sacrum			0	0	0.0%	1	0.8%	-0.8%	-0.76%
x d.Scap.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Hum.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x d.Hum.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Rad.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x d.Rad.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Ulna			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Carpal			0	0	0.0%	6	4.5%	-4.5%	-0.76%
x p.Mc.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x d.Mc.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x d.Femur			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Patella			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Tibia			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x d.Tibia			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Os Mal.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Talus			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Calcan.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Mt.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x d.Mt.			0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Vert.	1	1	2	2	22.2%	25	18.9%	3.3%	0.13%
x Ribs	3		3	3	33.3%	26	19.7%	13.6%	0.52%
x Ph.2		1	1	1	11.1%	8	6.1%	5.1%	0.63%
x Acetab.		1	1	1	11.1%	2	1.5%	9.6%	4.80%
x p.Femur		2	2	2	22.2%	2	1.5%	20.7%	10.35%

Table 8.33

Table 8.34-1

MEDIUM MAMMAL 4C1 NOT SCRN.	EXTER.	INTER.	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Horncore	4	2	6	6	1.2%	2	1.5%	-0.3%	-0.17%
x Occiput	1	1	2	2	0.4%	1	0.8%	-0.4%	-0.36%
Skull	12	11	23						
Max/Tth	2	1	3	3	1.2%	2	1.5%	-0.3%	-0.17%
Maxil.	0	1	1						
x Man/Tth	12	5	17	17	4.1%	2	1.5%	2.6%	1.31%
Mandib.	21	4	25						
x up. D3/M3	2	1	3	3					
x lw. D3/M3	4	0	4	4					
Teeth	25	2	27						
Hyoid	1	0	1						
x Atl/Axis	10	1	11	11	2.2%	2	1.5%	0.7%	0.33%
x Vert.	55	30	85	85	16.8%	25	18.9%	-2.2%	-0.09%
x Sacrum	2	0	2	2	0.4%	1	0.8%	-0.4%	-0.36%
x Ribs	70	18	88	88	17.4%	26	19.7%	-2.3%	-0.09%
Cst/Str	0	0	0						
x d.Scap.	16	4	20	20	3.9%	2	1.5%	2.4%	1.21%
Scapula	16	1	17						
x p.Hum.	4	4	8	8	1.6%	2	1.5%	0.1%	0.03%
s.Hum.	11	5	16						
x d.Hum.	28	13	41	41	8.1%	2	1.5%	6.6%	3.29%
x p.Rad.	11	7	18	18	3.6%	2	1.5%	2.0%	1.02%
s.Rad.	19	1	20						
x d.Rad.	10	9	19	19	3.7%	2	1.5%	2.2%	1.12%
x p.Ulna	1	5	6	6	1.2%	2	1.5%	-0.3%	-0.17%
s.Ulna	17	3	20						
d.Ulna	0	0	0						
x Carpal	1	0	1	1	0.2%	6	4.5%	-4.3%	-0.72%
x p.Mc.	3	2	5	5	1.0%	2	1.5%	-0.5%	-0.26%
s.Mc.	3	0	3						
x d.Mc.	5	2	7	7	1.4%	2	1.5%	-0.1%	-0.07%

Table 8.34-2

x	Acetab.	20	5	25	25	4.9%	2	1.5%	3.4%	1.71%
	Pelvis	3	4	7						
x	p.Femur	14	7	21	21	4.1%	2	1.5%	2.6%	1.31%
	s.Femur	7	2	9						
x	d.Femur	8	3	11	11	2.2%	2	1.5%	0.7%	0.33%
x	Patella	2	0	2	2	0.4%	2	1.5%	-1.1%	-0.56%
x	p.Tibia	7	6	13	13	2.6%	2	1.5%	1.0%	0.52%
	s.Tibia	23	4	27						
x	d.Tibia	11	5	16	16	3.2%	2	1.5%	1.6%	0.82%
x	Os Mal.	0	1	1	1	0.2%	2	1.5%	-1.3%	-0.66%
x	Talus	16	3	19	19	3.7%	2	1.5%	2.2%	1.12%
x	Calcan.	16	1	17	17	3.4%	2	1.5%	1.8%	0.92%
x	Tarsal	3	0	3	3	0.6%	3	2.3%	-1.7%	-0.56%
x	p.Mt.	5	2	7	7	1.4%	2	1.5%	-0.1%	-0.07%
	s.Mt.	3	0	3						
x	d.Mt.	2	3	5	5	1.0%	2	1.5%	-0.5%	-0.26%
x	p.Mp.	0	0	0	0					
	s.Mp.	2	0	2						
x	d.Mp.	0	0	0	0					
	Sesam.	0	0	0						
x	Ph.1	13	4	17	17	3.4%	8	6.1%	-2.7%	-0.34%
x	Ph.2	2	1	3	3	0.6%	8	6.1%	-5.5%	-0.68%
x	Ph.3	1	0	1	1	0.2%	8	6.1%	-5.9%	-0.73%
	Shaft	145	18	163						
	Frags.	28	1	29						
	Other	7	0	7						
	TOTAL	704	203	907 907	507	100.0%	132	100.0%	0.0%	8.71%

Table 8.35

MEDIUM MAMMAL 4C1 NOT SCRN.	EXTER.	INTER.	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Ph.3	1	0	1	1	0.2%	8	6.1%	-5.9%	-0.73%
x Carpal	1	0	1	1	0.2%	6	4.5%	-4.3%	-0.72%
x Ph.2	2	1	3	3	0.6%	8	6.1%	-5.5%	-0.68%
x Os Mal.	0	1	1	1	0.2%	2	1.5%	-1.3%	-0.66%
x Patella	2	0	2	2	0.4%	2	1.5%	-1.1%	-0.56%
x Tarsal	3	0	3	3	0.6%	3	2.3%	-1.7%	-0.56%
x Occiput	1	1	2	2	0.4%	1	0.8%	-0.4%	-0.36%
x Sacrum	2	0	2	2	0.4%	1	0.8%	-0.4%	-0.36%
x Ph.1	13	4	17	17	3.4%	8	6.1%	-2.7%	-0.34%
x p.Mc.	3	2	5	5	1.0%	2	1.5%	-0.5%	-0.26%
x d.Mt.	2	3	5	5	1.0%	2	1.5%	-0.5%	-0.26%
x Horncore	4	2	6	6	1.2%	2	1.5%	-0.3%	-0.17%
x Max/Tth	2	1	3	3	1.2%	2	1.5%	-0.3%	-0.17%
x p.Ulna	1	5	6	6	1.2%	2	1.5%	-0.3%	-0.17%
x Ribs	70	18	88	88	17.4%	26	19.7%	-2.3%	-0.09%
x Vert.	55	30	85	85	16.8%	25	18.9%	-2.2%	-0.09%
x d.Mc.	5	2	7	7	1.4%	2	1.5%	-0.1%	-0.07%
x p.Mt.	5	2	7	7	1.4%	2	1.5%	-0.1%	-0.07%
x p.Hum.	4	4	8	8	1.6%	2	1.5%	0.1%	0.03%
x Atl/Axis	10	1	11	11	2.2%	2	1.5%	0.7%	0.33%
x d.Femur	8	3	11	11	2.2%	2	1.5%	0.7%	0.33%
x p.Tibia	7	6	13	13	2.6%	2	1.5%	1.0%	0.52%
x d.Tibia	11	5	16	16	3.2%	2	1.5%	1.6%	0.82%
x Calcan.	16	1	17	17	3.4%	2	1.5%	1.8%	0.92%
x p.Rad.	11	7	18	18	3.6%	2	1.5%	2.0%	1.02%
x d.Rad.	10	9	19	19	3.7%	2	1.5%	2.2%	1.12%
x Talus	16	3	19	19	3.7%	2	1.5%	2.2%	1.12%
x d.Scap.	16	4	20	20	3.9%	2	1.5%	2.4%	1.21%
x Man/Tth	12	5	17	17	4.1%	2	1.5%	2.6%	1.31%
x p.Femur	14	7	21	21	4.1%	2	1.5%	2.6%	1.31%
x Acetab.	20	5	25	25	4.9%	2	1.5%	3.4%	1.71%
x d.Hum.	28	13	41	41	8.1%	2	1.5%	6.6%	3.29%

Table 8.36-1

LARGE MAMMAL 4C1 NOT SCRN.	EXTER.	INTER.	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Horncore	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Occiput	0	0	0	0	0.0%	1	0.8%	-0.8%	-0.76%
Skull	1	2	3						
x Max/Tth	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
Maxil.	1	0	1						
x Man/Tth	1	0	1	1	2.0%	2	1.5%	0.5%	0.26%
Mandib.	0	0	0						
x up. D3/M3	0	0	0	0					
x lw. D3/M3	0	0	0	0					
Teeth	9	0	9						
Hyoid	0	0	0						
x Atl/Axis	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Vert.	6	4	10	10	20.4%	25	18.9%	1.5%	0.06%
x Sacrum	1	0	1	1	2.0%	1	0.8%	1.3%	1.28%
x Ribs	6	2	8	8	16.3%	26	19.7%	-3.4%	-0.13%
Cst/Str	0	0	0						
x d.Scap.	2	0	2	2	4.1%	2	1.5%	2.6%	1.28%
Scapula	1	0	1						
x p.Hum.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
s.Hum.	0	0	0						
x d.Hum.	2	0	2	2	4.1%	2	1.5%	2.6%	1.28%
x p.Rad.	0	1	1	1	2.0%	2	1.5%	0.5%	0.26%
s.Rad.	1	0	1						
x d.Rad.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Ulna	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
s.Ulna	1	0	1						
d.Ulna	0	0	0						
x Carpal	2	0	2	2	4.1%	6	4.5%	-0.5%	-0.08%
x p.Mc.	1	0	1	1	2.0%	2	1.5%	0.5%	0.26%
s.Mc.	0	0	0						
x d.Mc.	0	0	0	0	1.0%	2	1.5%	-0.5%	-0.25%

Table 8.36-2

x	Acetab.	3	0	3	3	6.1%	2	1.5%	4.6%	2.30%
	Pelvis	1	0	1						
x	p.Femur	3	0	3	3	6.1%	2	1.5%	4.6%	2.30%
	s.Femur	0	0	0						
x	d.Femur	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x	Patella	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x	p.Tibia	1	1	2	2	4.1%	2	1.5%	2.6%	1.28%
	s.Tibia	0	0	0						
x	d.Tibia	1	0	1	1	2.0%	2	1.5%	0.5%	0.26%
x	Os Mal.	1	0	1	1	2.0%	2	1.5%	0.5%	0.26%
x	Talus	1	0	1	1	2.0%	2	1.5%	0.5%	0.26%
x	Calcan.	2	0	2	2	4.1%	2	1.5%	2.6%	1.28%
x	Tarsal	0	0	0	0	0.0%	3	2.3%	-2.3%	-0.76%
x	p.Mt.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
	s.Mt.	0	0	0						
x	d.Mt.	1	0	1	1	3.1%	2	1.5%	1.5%	0.77%
x	p.Mp.	0	0	0	0					
	s.Mp.	0	0	0						
x	d.Mp.	1	0	1	1					
	Sesam.	0	0	0						
x	Ph.1	2	0	2	2	4.1%	8	6.1%	-2.0%	-0.25%
x	Ph.2	2	1	3	3	6.1%	8	6.1%	0.1%	0.01%
x	Ph.3	0	1	1	1	2.0%	8	6.1%	-4.0%	-0.50%
	Shaft	8	1	9						
	Frags.	16	2	18						
	Other	0	0	0						
	TOTAL	78	15	93 93	49	100.0%	132	100.0%	0.0%	3.90%

Table 8.37

LARGE MAMMAL 4C1 NOT SCRN.	EXTER.	INTER.	TOT.	x-TOT	x%	STANDARD	S%	x%-S%	(x%-S%)/S
x Tarsal	0	0	0	0	0.0%	3	2.3%	-2.3%	-0.76%
x Horncore	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Occiput	0	0	0	0	0.0%	1	0.8%	-0.8%	-0.76%
x Max/Tth	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Atl/Axis	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Hum.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x d.Rad.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Ulna	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x d.Femur	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Patella	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x p.Mt.	0	0	0	0	0.0%	2	1.5%	-1.5%	-0.76%
x Ph.3	0	1	1	1	2.0%	8	6.1%	-4.0%	-0.50%
x Ph.1	2	0	2	2	4.1%	8	6.1%	-2.0%	-0.25%
x d.Mc.	0	0	0	0	1.0%	2	1.5%	-0.5%	-0.25%
x Ribs	6	2	8	8	16.3%	26	19.7%	-3.4%	-0.13%
x Carpal	2	0	2	2	4.1%	6	4.5%	-0.5%	-0.08%
x Ph.2	2	1	3	3	6.1%	8	6.1%	0.1%	0.01%
x Vert.	6	4	10	10	20.4%	25	18.9%	1.5%	0.06%
x Man/Tth	1	0	1	1	2.0%	2	1.5%	0.5%	0.26%
x p.Rad.	0	1	1	1	2.0%	2	1.5%	0.5%	0.26%
x p.Mc.	1	0	1	1	2.0%	2	1.5%	0.5%	0.26%
x d.Tibia	1	0	1	1	2.0%	2	1.5%	0.5%	0.26%
x Os Mal.	1	0	1	1	2.0%	2	1.5%	0.5%	0.26%
x Talus	1	0	1	1	2.0%	2	1.5%	0.5%	0.26%
x d.Mt.	1	0	1	1	3.1%	2	1.5%	1.5%	0.77%
x d.Scap.	2	0	2	2	4.1%	2	1.5%	2.6%	1.28%
x d.Hum.	2	0	2	2	4.1%	2	1.5%	2.6%	1.28%
x p.Tibia	1	1	2	2	4.1%	2	1.5%	2.6%	1.28%
x Calcan.	2	0	2	2	4.1%	2	1.5%	2.6%	1.28%
x Sacrum	1	0	1	1	2.0%	1	0.8%	1.3%	1.28%
x Acetab.	3	0	3	3	6.1%	2	1.5%	4.6%	2.30%
x p.Femur	3	0	3	3	6.1%	2	1.5%	4.6%	2.30%

TABLES 8.38-50

Matrices of skeletal part frequency ranks comparing temporal units from Tepe Yahya and Tepe Gaz Tavila-R37

See Chapter 8 for explanation; d# = square of differences between rank in immediately preceding column and rank recorded in first column with ranks

Table 8.38

MEDIUM MAMMAL

	R37	VII	d1	VI	d2	V	d3	IVC2sc	d4	IVC2ns	d5	IVC1ns	d6
x Man/Tth	1.0	1.0	0.00	1.0	0.00	1.0	0.00	5.0	16.00	4.5	12.25	3.5	6.25
x Horncore	2.0	7.0	25.00	5.0	9.00	16.0	196.00	10.5	72.25	9.5	56.25	20.0	324.00
x d.Scap.	3.0	4.0	1.00	12.0	81.00	18.5	240.25	22.0	361.00	12.0	81.00	5.0	4.00
x Acetab.	4.0	6.0	4.00	7.0	9.00	4.5	0.25	4.0	0.00	4.5	0.25	2.0	4.00
x Ribs	5.0	9.0	16.00	21.5	272.25	21.0	256.00	12.0	49.00	18.0	169.00	17.5	156.25
x p.Mc.	6.0	10.0	16.00	18.0	144.00	14.0	64.00	19.5	182.25	20.5	210.25	22.5	272.25
x d.Tibia	7.0	11.5	20.25	7.0	0.00	7.5	0.25	3.0	16.00	3.0	16.00	10.0	9.00
x p.Mt.	8.0	11.5	12.25	12.0	16.00	6.0	4.00	19.5	132.25	14.5	42.25	15.5	56.25
x p.Rad.	9.0	8.0	1.00	7.0	4.00	9.5	0.25	7.0	4.00	6.0	9.00	8.0	1.00
x d.Hum.	10.5	3.0	56.25	3.0	56.25	3.0	56.25	2.0	72.25	1.0	90.25	1.0	90.25
x Talus	10.5	5.0	30.25	4.0	42.25	2.0	72.25	13.5	9.00	20.5	100.00	6.5	16.00
x d.Mc.	12.5	21.0	72.25	16.0	12.25	22.5	100.00	17.5	25.00	26.5	196.00	15.5	9.00
x p.Femur	12.5	13.5	1.00	14.0	2.25	4.5	64.00	1.0	132.25	2.0	110.25	3.5	81.00
x Atl/Axis	14.5	18.5	16.00	12.0	6.25	18.5	16.00	15.5	1.00	20.5	36.00	12.5	4.00
x d.Rad.	14.5	13.5	1.00	15.0	0.25	12.5	4.00	9.0	30.25	9.5	25.00	6.5	64.00
x Max/Tth	16.5	2.0	210.25	2.0	210.25	11.0	30.25	6.0	110.25	9.5	49.00	20.0	12.25
x d.Mt.	16.5	17.0	0.25	21.5	25.00	20.0	12.25	22.0	30.25	14.5	4.00	22.5	36.00
x Calcan.	18.0	18.5	0.25	10.0	64.00	9.5	72.25	10.5	56.25	16.0	4.00	9.0	81.00
x Vert.	19.0	22.5	12.25	25.0	36.00	24.5	30.25	22.0	9.00	20.5	2.25	17.5	2.25
x p.Ulna	20.5	15.0	30.25	17.0	12.25	7.5	169.00	17.5	9.00	13.0	56.25	20.0	0.25
x p.Tibia	20.5	24.0	12.25	28.5	64.00	16.0	20.25	13.5	49.00	7.0	182.25	11.0	90.25
x Ph.1	22.0	26.5	20.25	27.0	25.00	26.0	16.00	27.0	25.00	24.0	4.00	24.0	4.00
x p.Hum.	23.0	28.0	25.00	19.0	16.00	22.5	0.25	24.0	1.00	17.0	36.00	14.0	81.00
x Occiput	25.5	20.0	30.25	23.0	6.25	16.0	90.25	30.0	20.25	26.5	1.00	25.5	0.00
x Sacrum	25.5	25.0	0.25	28.5	9.00	27.0	2.25	15.5	100.00	26.5	1.00	25.5	0.00
x d.Femur	25.5	16.0	90.25	9.0	272.25	12.5	169.00	8.0	306.25	9.5	256.00	12.5	169.00
x Patella	25.5	29.5	16.00	24.0	2.25	24.5	1.00	25.0	0.25	23.0	6.25	27.5	4.00
x Tarsal	28.0	22.5	30.25	20.0	64.00	28.0	0.00	29.0	1.00	26.5	2.25	27.5	0.25
x Carpal	29.0	26.5	6.25	31.0	4.00	30.0	1.00	27.0	4.00	29.0	0.00	31.0	4.00
x Ph.3	30.0	32.0	4.00	32.0	4.00	31.5	2.25	31.0	1.00	31.5	2.25	32.0	4.00
x Os Mal.	31.5	29.5	4.00	26.0	30.25	31.5	0.00	32.0	0.25	31.5	0.00	29.0	6.25
x Ph.2	31.5	31.0	0.25	30.0	2.25	29.0	6.25	27.0	20.25	30.0	2.25	30.0	2.25

MEDIUM MAMMAL

	VII	VI	d2	V	d3	IVC2sc	d4	IVC2ns	d5	IVC1ns	d6
x Man/Tth	1.0	1.0	0.00	1.0	0.00	5.0	16.00	4.5	12.25	3.5	6.25
x Max/Tth	2.0	2.0	0.00	11.0	81.00	6.0	16.00	9.5	56.25	20.0	324.00
x d.Hum.	3.0	3.0	0.00	3.0	0.00	2.0	1.00	1.0	4.00	1.0	4.00
x d.Scap.	4.0	12.0	64.00	18.5	210.25	22.0	324.00	12.0	64.00	5.0	1.00
x Talus	5.0	4.0	1.00	2.0	9.00	13.5	72.25	20.5	240.25	6.5	2.25
x Acetab.	6.0	7.0	1.00	4.5	2.25	4.0	4.00	4.5	2.25	2.0	16.00
x Horncore	7.0	5.0	4.00	16.0	81.00	10.5	12.25	9.5	6.25	20.0	169.00
x p.Rad.	8.0	7.0	1.00	9.5	2.25	7.0	1.00	6.0	4.00	8.0	0.00
x Ribs	9.0	21.5	156.25	21.0	144.00	12.0	9.00	18.0	81.00	17.5	72.25
x p.Mc.	10.0	18.0	64.00	14.0	16.00	19.5	90.25	20.5	110.25	22.5	156.25
x d.Tibia	11.5	7.0	20.25	7.5	16.00	3.0	72.25	3.0	72.25	10.0	2.25
x p.Mt.	11.5	12.0	0.25	6.0	30.25	19.5	64.00	14.5	9.00	15.5	16.00
x p.Femur	13.5	14.0	0.25	4.5	81.00	1.0	156.25	2.0	132.25	3.5	100.00
x d.Rad.	13.5	15.0	2.25	12.5	1.00	9.0	20.25	9.5	16.00	6.5	49.00
x p.Ulna	15.0	17.0	4.00	7.5	56.25	17.5	6.25	13.0	4.00	20.0	25.00
x d.Femur	16.0	9.0	49.00	12.5	12.25	8.0	64.00	9.5	42.25	12.5	12.25
x d.Mt.	17.0	21.5	20.25	20.0	9.00	22.0	25.00	14.5	6.25	22.5	30.25
x Atl/Axis	18.5	12.0	42.25	18.5	0.00	15.5	9.00	20.5	4.00	12.5	36.00
x Calcan.	18.5	10.0	72.25	9.5	81.00	10.5	64.00	16.0	6.25	9.0	90.25
x Occiput	20.0	23.0	9.00	16.0	16.00	30.0	100.00	26.5	42.25	25.5	30.25
x d.Mc.	21.0	16.0	25.00	22.5	2.25	17.5	12.25	26.5	30.25	15.5	30.25
x Vert.	22.5	25.0	6.25	24.5	4.00	22.0	0.25	20.5	4.00	17.5	25.00
x Tarsal	22.5	20.0	6.25	28.0	30.25	29.0	42.25	26.5	16.00	27.5	25.00
x p.Tibia	24.0	28.5	20.25	16.0	64.00	13.5	110.25	7.0	289.00	11.0	169.00
x Sacrum	25.0	28.5	12.25	27.0	4.00	15.5	90.25	26.5	2.25	25.5	0.25
x Ph.1	26.5	27.0	0.25	26.0	0.25	27.0	0.25	24.0	6.25	24.0	6.25
x Carpal	26.5	31.0	20.25	30.0	12.25	27.0	0.25	29.0	6.25	31.0	20.25
x p.Hum.	28.0	19.0	81.00	22.5	30.25	24.0	16.00	17.0	121.00	14.0	196.00
x Patella	29.5	24.0	30.25	24.5	25.00	25.0	20.25	23.0	42.25	27.5	4.00
x Os Mal.	29.5	26.0	12.25	31.5	4.00	32.0	6.25	31.5	4.00	29.0	0.25
x Ph.2	31.0	30.0	1.00	29.0	4.00	27.0	16.00	30.0	1.00	30.0	1.00
x Ph.3	32.0	32.0	0.00	31.5	0.25	31.0	1.00	31.5	0.25	32.0	0.00

Table 8.39

Table 8.40

MEDIUM MAMMAL

	VI	V	d3	IVC2sc	d4	IVC2ns	d5	IVC1ns	d6
x Man/Tth	1.0	1.0	0.00	5.0	16.00	4.5	12.25	3.5	6.25
x Max/Tth	2.0	11.0	81.00	6.0	16.00	9.5	56.25	20.0	324.00
x d.Hum.	3.0	3.0	0.00	2.0	1.00	1.0	4.00	1.0	4.00
x Talus	4.0	2.0	4.00	13.5	90.25	20.5	272.25	6.5	6.25
x Horncore	5.0	16.0	121.00	10.5	30.25	9.5	20.25	20.0	225.00
x Acetab.	7.0	4.5	6.25	4.0	9.00	4.5	6.25	2.0	25.00
x p.Rad.	7.0	9.5	6.25	7.0	0.00	6.0	1.00	8.0	1.00
x d.Tibia	7.0	7.5	0.25	3.0	16.00	3.0	16.00	10.0	9.00
x d.Femur	9.0	12.5	12.25	8.0	1.00	9.5	0.25	12.5	12.25
x Calcan.	10.0	9.5	0.25	10.5	0.25	16.0	36.00	9.0	1.00
x d.Scap.	12.0	18.5	42.25	22.0	100.00	12.0	0.00	5.0	49.00
x p.Mt.	12.0	6.0	36.00	19.5	56.25	14.5	6.25	15.5	12.25
x Atl/Axis	12.0	18.5	42.25	15.5	12.25	20.5	72.25	12.5	0.25
x p.Femur	14.0	4.5	90.25	1.0	169.00	2.0	144.00	3.5	110.25
x d.Rad.	15.0	12.5	6.25	9.0	36.00	9.5	30.25	6.5	72.25
x d.Mc.	16.0	22.5	42.25	17.5	2.25	26.5	110.25	15.5	0.25
x p.Ulna	17.0	7.5	90.25	17.5	0.25	13.0	16.00	20.0	9.00
x p.Mc.	18.0	14.0	16.00	19.5	2.25	20.5	6.25	22.5	20.25
x p.Hum.	19.0	22.5	12.25	24.0	25.00	17.0	4.00	14.0	25.00
x Tarsal	20.0	28.0	64.00	29.0	81.00	26.5	42.25	27.5	56.25
x Ribs	21.5	21.0	0.25	12.0	90.25	18.0	12.25	17.5	16.00
x d.Mt.	21.5	20.0	2.25	22.0	0.25	14.5	49.00	22.5	1.00
x Occiput	23.0	16.0	49.00	30.0	49.00	26.5	12.25	25.5	6.25
x Patella	24.0	24.5	0.25	25.0	1.00	23.0	1.00	27.5	12.25
x Vert.	25.0	24.5	0.25	22.0	9.00	20.5	20.25	17.5	56.25
x Os Mal.	26.0	31.5	30.25	32.0	36.00	31.5	30.25	29.0	9.00
x Ph.1	27.0	26.0	1.00	27.0	0.00	24.0	9.00	24.0	9.00
x p.Tibia	28.5	16.0	156.25	13.5	225.00	7.0	462.25	11.0	306.25
x Sacrum	28.5	27.0	2.25	15.5	169.00	26.5	4.00	25.5	9.00
x Ph.2	30.0	29.0	1.00	27.0	9.00	30.0	0.00	30.0	0.00
x Carpal	31.0	30.0	1.00	27.0	16.00	29.0	4.00	31.0	0.00
x Ph.3	32.0	31.5	0.25	31.0	1.00	31.5	0.25	32.0	0.00

Table 8.41

MEDIUM MAMMAL

	V	IVC2sc	d4	IVC2ns	d5	IVC1ns	d6
x Man/Tth	1.0	5.0	16.00	4.5	12.25	3.5	6.25
x Talus	2.0	13.5	132.25	20.5	342.25	6.5	20.25
x d.Hum.	3.0	2.0	1.00	1.0	4.00	1.0	4.00
x Acetab.	4.5	4.0	0.25	4.5	0.00	2.0	6.25
x p.Femur	4.5	1.0	12.25	2.0	6.25	3.5	1.00
x p.Mt.	6.0	19.5	182.25	14.5	72.25	15.5	90.25
x d.Tibia	7.5	3.0	20.25	3.0	20.25	10.0	6.25
x p.Ulna	7.5	17.5	100.00	13.0	30.25	20.0	156.25
x p.Rad.	9.5	7.0	6.25	6.0	12.25	8.0	2.25
x Calcan.	9.5	10.5	1.00	16.0	42.25	9.0	0.25
x Max/Tth	11.0	6.0	25.00	9.5	2.25	20.0	81.00
x d.Femur	12.5	8.0	20.25	9.5	9.00	12.5	0.00
x d.Rad.	12.5	9.0	12.25	9.5	9.00	6.5	36.00
x p.Mc.	14.0	19.5	30.25	20.5	42.25	22.5	72.25
x Horncore	16.0	10.5	30.25	9.5	42.25	20.0	16.00
x Occiput	16.0	30.0	196.00	26.5	110.25	25.5	90.25
x p.Tibia	16.0	13.5	6.25	7.0	81.00	11.0	25.00
x d.Scap.	18.5	22.0	12.25	12.0	42.25	5.0	182.25
x Atl/Axis	18.5	15.5	9.00	20.5	4.00	12.5	36.00
x d.Mt.	20.0	22.0	4.00	14.5	30.25	22.5	6.25
x Ribs	21.0	12.0	81.00	18.0	9.00	17.5	12.25
x d.Mc.	22.5	17.5	25.00	26.5	16.00	15.5	49.00
x p.Hum.	22.5	24.0	2.25	17.0	30.25	14.0	72.25
x Patella	24.5	25.0	0.25	23.0	2.25	27.5	9.00
x Vert.	24.5	22.0	6.25	20.5	16.00	17.5	49.00
x Ph.1	26.0	27.0	1.00	24.0	4.00	24.0	4.00
x Sacrum	27.0	15.5	132.25	26.5	0.25	25.5	2.25
x Tarsal	28.0	29.0	1.00	26.5	2.25	27.5	0.25
x Ph.2	29.0	27.0	4.00	30.0	1.00	30.0	1.00
x Carpal	30.0	27.0	9.00	29.0	1.00	31.0	1.00
x Os Mal.	31.5	32.0	0.25	31.5	0.00	29.0	6.25
x Ph.3	31.5	31.0	0.25	31.5	0.00	32.0	0.25

Table 8.42

MEDIUM MAMMAL

	IVC2sc	IVC2ns	d5	IVC1ns	d6
x p.Femur	1.0	2.0	1.00	3.5	6.25
x d.Hum.	2.0	1.0	1.00	1.0	1.00
x d.Tibia	3.0	3.0	0.00	10.0	49.00
x Acetab.	4.0	4.5	0.25	2.0	4.00
x Man/Tth	5.0	4.5	0.25	3.5	2.25
x Max/Tth	6.0	9.5	12.25	20.0	196.00
x p.Rad.	7.0	6.0	1.00	8.0	1.00
x d.Femur	8.0	9.5	2.25	12.5	20.25
x d.Rad.	9.0	9.5	0.25	6.5	6.25
x Calcan.	10.5	16.0	30.25	9.0	2.25
x Horncore	10.5	9.5	1.00	20.0	90.25
x Ribs	12.0	18.0	36.00	17.5	30.25
x Talus	13.5	20.5	49.00	6.5	49.00
x p.Tibia	13.5	7.0	42.25	11.0	6.25
x Atl/Axis	15.5	20.5	25.00	12.5	9.00
x Sacrum	15.5	26.5	121.00	25.5	100.00
x p.Ulna	17.5	13.0	20.25	20.0	6.25
x d.Mc.	17.5	26.5	81.00	15.5	4.00
x p.Mt.	19.5	14.5	25.00	15.5	16.00
x p.Mc.	19.5	20.5	1.00	22.5	9.00
x d.Scap.	22.0	12.0	100.00	5.0	289.00
x d.Mt.	22.0	14.5	56.25	22.5	0.25
x Vert.	22.0	20.5	2.25	17.5	20.25
x p.Hum.	24.0	17.0	49.00	14.0	100.00
x Patella	25.0	23.0	4.00	27.5	6.25
x Ph.1	27.0	24.0	9.00	24.0	9.00
x Ph.2	27.0	30.0	9.00	30.0	9.00
x Carpal	27.0	29.0	4.00	31.0	16.00
x Tarsal	29.0	26.5	6.25	27.5	2.25
x Occiput	30.0	26.5	12.25	25.5	20.25
x Ph.3	31.0	31.5	0.25	32.0	1.00
x Os Mal.	32.0	31.5	0.25	29.0	9.00

Table 8.43

MEDIUM MAMMAL

		IVC2ns	IVC1ns	d6
x	d.Hum.	1.0	1.0	0.00
x	p.Femur	2.0	3.5	2.25
x	d.Tibia	3.0	10.0	49.00
x	Acetab.	4.5	2.0	6.25
x	Man/Tth	4.5	3.5	1.00
x	p.Rad.	6.0	8.0	4.00
x	p.Tibia	7.0	11.0	16.00
x	Max/Tth	9.5	20.0	110.25
x	d.Femur	9.5	12.5	9.00
x	d.Rad.	9.5	6.5	9.00
x	Horncore	9.5	20.0	110.25
x	d.Scap.	12.0	5.0	49.00
x	p.Ulna	13.0	20.0	49.00
x	p.Mt.	14.5	15.5	1.00
x	d.Mt.	14.5	22.5	64.00
x	Calcan.	16.0	9.0	49.00
x	p.Hum.	17.0	14.0	9.00
x	Ribs	18.0	17.5	0.25
x	Talus	20.5	6.5	196.00
x	Atl/Axis	20.5	12.5	64.00
x	p.Mc.	20.5	22.5	4.00
x	Vert.	20.5	17.5	9.00
x	Patella	23.0	27.5	20.25
x	Ph.1	24.0	24.0	0.00
x	Sacrum	26.5	25.5	1.00
x	d.Mc.	26.5	15.5	121.00
x	Tarsal	26.5	27.5	1.00
x	Occiput	26.5	25.5	1.00
x	Carpal	29.0	31.0	4.00
x	Ph.2	30.0	30.0	0.00
x	Ph.3	31.5	32.0	0.25
x	Os Mal.	31.5	29.0	6.25

LARGE MAMMAL

	R37	VII	d1	VI	d2	V	d3	IVC2sc	d4	IVC2ns	d5	IVC1ns	d6
x Sacrum	1.0	25.5	600.25	23.0	484.00	29.0	784.00	25.5	600.25	26.0	625.00	5.0	16.00
x d.Rad.	2.5	25.5	529.00	25.0	506.25	29.0	702.25	2.5	0.00	6.0	12.25	27.0	600.25
x Acetab.	2.5	1.0	2.25	6.5	16.00	1.0	2.25	11.5	81.00	11.0	72.25	1.5	1.00
x d.Mc.	4.0	12.0	64.00	2.0	4.00	20.0	256.00	25.5	462.25	26.0	484.00	19.5	240.25
x Ribs	5.0	11.0	36.00	18.0	169.00	6.0	1.00	7.0	4.00	8.0	9.00	18.0	169.00
x Horncore	6.5	31.0	600.25	20.0	182.25	29.0	506.25	25.5	361.00	26.0	380.25	27.0	420.25
x Man/Tth	6.5	2.0	20.25	10.0	12.25	2.5	16.00	5.0	2.25	3.0	12.25	11.5	25.00
x Vert.	8.0	20.0	144.00	26.0	324.00	24.0	256.00	8.0	0.00	19.0	121.00	15.0	49.00
x Ph.2	9.0	24.0	225.00	15.5	42.25	7.0	4.00	11.5	6.25	15.0	36.00	16.0	49.00
x Atl/Axis	13.5	6.5	49.00	30.5	289.00	29.0	240.25	25.5	144.00	26.0	156.25	27.0	182.25
x d.Scap.	13.5	21.0	56.25	23.0	90.25	20.0	42.25	5.0	72.25	6.0	56.25	5.0	72.25
x d.Hum.	13.5	13.5	0.00	6.5	49.00	13.5	0.00	1.0	156.25	1.0	156.25	5.0	72.25
x p.Mc.	13.5	3.0	110.25	8.0	30.25	9.5	16.00	25.5	144.00	26.0	156.25	11.5	4.00
x p.Tibia	13.5	27.5	196.00	28.0	210.25	29.0	240.25	25.5	144.00	26.0	156.25	5.0	72.25
x d.Tibia	13.5	17.5	16.00	15.5	4.00	13.5	0.00	2.5	121.00	3.0	110.25	11.5	4.00
x Talus	13.5	8.0	30.25	1.0	156.25	4.0	90.25	5.0	72.25	3.0	110.25	11.5	4.00
x Calcan.	13.5	4.0	90.25	4.0	90.25	13.5	0.00	11.5	4.00	11.0	6.25	5.0	72.25
x Carpal	18.5	9.5	81.00	19.0	0.25	20.0	2.25	17.0	2.25	16.0	6.25	17.0	2.25
x Tarsal	18.5	15.0	12.25	17.0	2.25	13.5	25.00	15.0	12.25	14.0	20.25	27.0	72.25
x d.Mt.	20.5	5.0	240.25	5.0	240.25	13.5	49.00	25.5	25.00	26.0	30.25	8.0	156.25
x Ph.1	20.5	22.0	2.25	12.0	72.25	2.5	324.00	16.0	20.25	17.5	9.00	19.5	1.00
x Ph.3	22.0	32.0	100.00	21.0	1.00	25.0	9.00	18.0	16.00	17.5	20.25	21.0	1.00
x Occiput	27.5	17.5	100.00	28.0	0.25	5.0	506.25	25.5	4.00	26.0	2.25	27.0	0.25
x Max/Tth	27.5	6.5	441.00	13.5	196.00	13.5	196.00	25.5	4.00	26.0	2.25	27.0	0.25
x p.Hum.	27.5	29.5	4.00	32.0	20.25	29.0	2.25	25.5	4.00	26.0	2.25	27.0	0.25
x p.Rad.	27.5	9.5	324.00	10.0	306.25	20.0	56.25	25.5	4.00	11.0	272.25	11.5	256.00
x p.Ulna	27.5	19.0	72.25	10.0	306.25	20.0	56.25	25.5	4.00	26.0	2.25	27.0	0.25
x p.Femur	27.5	13.5	196.00	13.5	196.00	29.0	2.25	11.5	256.00	6.0	462.25	1.5	676.00
x d.Femur	27.5	23.0	20.25	28.0	0.25	20.0	56.25	25.5	4.00	26.0	2.25	27.0	0.25
x Patella	27.5	29.5	4.00	30.5	9.00	20.0	56.25	25.5	4.00	26.0	2.25	27.0	0.25
x Os Mal.	27.5	27.5	0.00	23.0	20.25	8.0	380.25	11.5	256.00	11.0	272.25	11.5	256.00
x p.Mt.	27.5	16.0	132.25	3.0	600.25	9.5	324.00	11.5	256.00	11.0	272.25	27.0	0.25

Table 8.44

Table 8.45

LARGE MAMMAL

	VII	VI	d2	V	d3	IVC2sc	d4	IVC2ns	d5	IVC1ns	d6
x Acetab.	1.0	6.5	30.25	1.0	0.00	11.5	110.25	11.0	100.00	1.5	0.25
x Man/Tth	2.0	10.0	64.00	2.5	0.25	5.0	9.00	3.0	1.00	11.5	90.25
x p.Mc.	3.0	8.0	25.00	9.5	42.25	25.5	506.25	26.0	529.00	11.5	72.25
x Calcan.	4.0	4.0	0.00	13.5	90.25	11.5	56.25	11.0	49.00	5.0	1.00
x d.Mt.	5.0	5.0	0.00	13.5	72.25	25.5	420.25	26.0	441.00	8.0	9.00
x Atl/Axis	6.5	30.5	576.00	29.0	506.25	25.5	361.00	26.0	380.25	27.0	420.25
x Max/Tth	6.5	13.5	49.00	13.5	49.00	25.5	361.00	26.0	380.25	27.0	420.25
x Talus	8.0	1.0	49.00	4.0	16.00	5.0	9.00	3.0	25.00	11.5	12.25
x Carpal	9.5	19.0	90.25	20.0	110.25	17.0	56.25	16.0	42.25	17.0	56.25
x p.Rad.	9.5	10.0	0.25	20.0	110.25	25.5	256.00	11.0	2.25	11.5	4.00
x Ribs	11.0	18.0	49.00	6.0	25.00	7.0	16.00	8.0	9.00	18.0	49.00
x d.Mc.	12.0	2.0	100.00	20.0	64.00	25.5	182.25	26.0	196.00	19.5	56.25
x d.Hum.	13.5	6.5	49.00	13.5	0.00	1.0	156.25	1.0	156.25	5.0	72.25
x p.Femur	13.5	13.5	0.00	29.0	240.25	11.5	4.00	6.0	56.25	1.5	144.00
x Tarsal	15.0	17.0	4.00	13.5	2.25	15.0	0.00	14.0	1.00	27.0	144.00
x p.Mt.	16.0	3.0	169.00	9.5	42.25	11.5	20.25	11.0	25.00	27.0	121.00
x d.Tibia	17.5	15.5	4.00	13.5	16.00	2.5	225.00	3.0	210.25	11.5	36.00
x Occiput	17.5	28.0	110.25	5.0	156.25	25.5	64.00	26.0	72.25	27.0	90.25
x p.Ulna	19.0	10.0	81.00	20.0	1.00	25.5	42.25	26.0	49.00	27.0	64.00
x Vert.	20.0	26.0	36.00	24.0	16.00	8.0	144.00	19.0	1.00	15.0	25.00
x d.Scap.	21.0	23.0	4.00	20.0	1.00	5.0	256.00	6.0	225.00	5.0	256.00
x Ph.1	22.0	12.0	100.00	2.5	380.25	16.0	36.00	17.5	20.25	19.5	6.25
x d.Femur	23.0	28.0	25.00	20.0	9.00	25.5	6.25	26.0	9.00	27.0	16.00
x Ph.2	24.0	15.5	72.25	7.0	289.00	11.5	156.25	15.0	81.00	16.0	64.00
x Sacrum	25.5	23.0	6.25	29.0	12.25	25.5	0.00	26.0	0.25	5.0	420.25
x d.Rad.	25.5	25.0	0.25	29.0	12.25	2.5	529.00	6.0	380.25	27.0	2.25
x p.Tibia	27.5	28.0	0.25	29.0	2.25	25.5	4.00	26.0	2.25	5.0	506.25
x Os Mal.	27.5	23.0	20.25	8.0	380.25	11.5	256.00	11.0	272.25	11.5	256.00
x p.Hum.	29.5	32.0	6.25	29.0	0.25	25.5	16.00	26.0	12.25	27.0	6.25
x Patella	29.5	30.5	1.00	20.0	90.25	25.5	16.00	26.0	12.25	27.0	6.25
x Horncore	31.0	20.0	121.00	29.0	4.00	25.5	30.25	26.0	25.00	27.0	16.00
x Ph.3	32.0	21.0	121.00	25.0	49.00	18.0	196.00	17.5	210.25	21.0	121.00

Table 8.46

LARGE MAMMAL

	VI	V	d3	IVC2sc	d4	IVC2ns	d5	IVC1ns	d6
x Talus	1.0	4.0	9.00	5.0	16.00	3.0	4.00	11.5	110.25
x d.Mc.	2.0	20.0	324.00	25.5	552.25	26.0	576.00	19.5	306.25
x p.Mt.	3.0	9.5	42.25	11.5	72.25	11.0	64.00	27.0	576.00
x Calcan.	4.0	13.5	90.25	11.5	56.25	11.0	49.00	5.0	1.00
x d.Mt.	5.0	13.5	72.25	25.5	420.25	26.0	441.00	8.0	9.00
x Acetab.	6.5	1.0	30.25	11.5	25.00	11.0	20.25	1.5	25.00
x d.Hum.	6.5	13.5	49.00	1.0	30.25	1.0	30.25	5.0	2.25
x p.Mc.	8.0	9.5	2.25	25.5	306.25	26.0	324.00	11.5	12.25
x Man/Tth	10.0	2.5	56.25	5.0	25.00	3.0	49.00	11.5	2.25
x p.Rad.	10.0	20.0	100.00	25.5	240.25	11.0	1.00	11.5	2.25
x p.Ulna	10.0	20.0	100.00	25.5	240.25	26.0	256.00	27.0	289.00
x Ph.1	12.0	2.5	90.25	16.0	16.00	17.5	30.25	19.5	56.25
x Max/Tth	13.5	13.5	0.00	25.5	144.00	26.0	156.25	27.0	182.25
x p.Femur	13.5	29.0	240.25	11.5	4.00	6.0	56.25	1.5	144.00
x d.Tibia	15.5	13.5	4.00	2.5	169.00	3.0	156.25	11.5	16.00
x Ph.2	15.5	7.0	72.25	11.5	16.00	15.0	0.25	16.0	0.25
x Tarsal	17.0	13.5	12.25	15.0	4.00	14.0	9.00	27.0	100.00
x Ribs	18.0	6.0	144.00	7.0	121.00	8.0	100.00	18.0	0.00
x Carpal	19.0	20.0	1.00	17.0	4.00	16.0	9.00	17.0	4.00
x Horncore	20.0	29.0	81.00	25.5	30.25	26.0	36.00	27.0	49.00
x Ph.3	21.0	25.0	16.00	18.0	9.00	17.5	12.25	21.0	0.00
x d.Scap.	23.0	20.0	9.00	5.0	324.00	6.0	289.00	5.0	324.00
x Sacrum	23.0	29.0	36.00	25.5	6.25	26.0	9.00	5.0	324.00
x Os Mal.	23.0	8.0	225.00	11.5	132.25	11.0	144.00	11.5	132.25
x d.Rad.	25.0	29.0	16.00	2.5	506.25	6.0	361.00	27.0	4.00
x Vert.	26.0	24.0	4.00	8.0	324.00	19.0	49.00	15.0	121.00
x Occiput	28.0	5.0	529.00	25.5	6.25	26.0	4.00	27.0	1.00
x d.Femur	28.0	20.0	64.00	25.5	6.25	26.0	4.00	27.0	1.00
x p.Tibia	28.0	29.0	1.00	25.5	6.25	26.0	4.00	5.0	529.00
x Atl/Axis	30.5	29.0	2.25	25.5	25.00	26.0	20.25	27.0	12.25
x Patella	30.5	20.0	110.25	25.5	25.00	26.0	20.25	27.0	12.25
x p.Hum.	32.0	29.0	9.00	25.5	42.25	26.0	36.00	27.0	25.00

Table 8.47

LARGE MAMMAL

		V	IVC2sc	d4	IVC2ns	d5	IVC1ns	d6
x	Acetab.	1.0	11.5	110.25	11.0	100.00	1.5	0.25
x	Man/Tth	2.5	5.0	6.25	3.0	0.25	11.5	81.00
x	Ph.1	2.5	16.0	182.25	17.5	225.00	19.5	289.00
x	Talus	4.0	5.0	1.00	3.0	1.00	11.5	56.25
x	Occiput	5.0	25.5	420.25	26.0	441.00	27.0	484.00
x	Ribs	6.0	7.0	1.00	8.0	4.00	18.0	144.00
x	Ph.2	7.0	11.5	20.25	15.0	64.00	16.0	81.00
x	Os Mal.	8.0	11.5	12.25	11.0	9.00	11.5	12.25
x	p.Mt.	9.5	11.5	4.00	11.0	2.25	27.0	306.25
x	p.Mc.	9.5	25.5	256.00	26.0	272.25	11.5	4.00
x	Calcan.	13.5	11.5	4.00	11.0	6.25	5.0	72.25
x	d.Mt.	13.5	25.5	144.00	26.0	156.25	8.0	30.25
x	d.Hum.	13.5	1.0	156.25	1.0	156.25	5.0	72.25
x	Max/Tth	13.5	25.5	144.00	26.0	156.25	27.0	182.25
x	d.Tibia	13.5	2.5	121.00	3.0	110.25	11.5	4.00
x	Tarsal	13.5	15.0	2.25	14.0	0.25	27.0	182.25
x	d.Mc.	20.0	25.5	30.25	26.0	36.00	19.5	0.25
x	p.Rad.	20.0	25.5	30.25	11.0	81.00	11.5	72.25
x	p.Ulna	20.0	25.5	30.25	26.0	36.00	27.0	49.00
x	Carpal	20.0	17.0	9.00	16.0	16.00	17.0	9.00
x	d.Scap.	20.0	5.0	225.00	6.0	196.00	5.0	225.00
x	d.Femur	20.0	25.5	30.25	26.0	36.00	27.0	49.00
x	Patella	20.0	25.5	30.25	26.0	36.00	27.0	49.00
x	Vert.	24.0	8.0	256.00	19.0	25.00	15.0	81.00
x	Ph.3	25.0	18.0	49.00	17.5	56.25	21.0	16.00
x	p.Femur	29.0	11.5	306.25	6.0	529.00	1.5	756.25
x	Horncore	29.0	25.5	12.25	26.0	9.00	27.0	4.00
x	Sacrum	29.0	25.5	12.25	26.0	9.00	5.0	576.00
x	d.Rad.	29.0	2.5	702.25	6.0	529.00	27.0	4.00
x	p.Tibia	29.0	25.5	12.25	26.0	9.00	5.0	576.00
x	Atl/Axis	29.0	25.5	12.25	26.0	9.00	27.0	4.00
x	p.Hum.	29.0	25.5	12.25	26.0	9.00	27.0	4.00

LARGE MAMMAL

	IVC2sc	IVC2ns	d5	IVC1ns	d6
x d.Hum.	1.0	1.0	0.00	5.0	16.00
x d.Tibia	2.5	3.0	0.25	11.5	81.00
x d.Rad.	2.5	6.0	12.25	27.0	600.25
x Man/Tth	5.0	3.0	4.00	11.5	42.25
x Talus	5.0	3.0	4.00	11.5	42.25
x d.Scap.	5.0	6.0	1.00	5.0	0.00
x Ribs	7.0	8.0	1.00	18.0	121.00
x Vert.	8.0	19.0	121.00	15.0	49.00
x Acetab.	11.5	11.0	0.25	1.5	100.00
x Ph.2	11.5	15.0	12.25	16.0	20.25
x Os Mal.	11.5	11.0	0.25	11.5	0.00
x p.Mt.	11.5	11.0	0.25	27.0	240.25
x Calcan.	11.5	11.0	0.25	5.0	42.25
x p.Femur	11.5	6.0	30.25	1.5	100.00
x Tarsal	15.0	14.0	1.00	27.0	144.00
x Ph.1	16.0	17.5	2.25	19.5	12.25
x Carpal	17.0	16.0	1.00	17.0	0.00
x Ph.3	18.0	17.5	0.25	21.0	9.00
x Occiput	25.5	26.0	0.25	27.0	2.25
x p.Mc.	25.5	26.0	0.25	11.5	196.00
x d.Mt.	25.5	26.0	0.25	8.0	306.25
x Max/Tth	25.5	26.0	0.25	27.0	2.25
x d.Mc.	25.5	26.0	0.25	19.5	36.00
x p.Rad.	25.5	11.0	210.25	11.5	196.00
x p.Ulna	25.5	26.0	0.25	27.0	2.25
x d.Femur	25.5	26.0	0.25	27.0	2.25
x Patella	25.5	26.0	0.25	27.0	2.25
x Horncore	25.5	26.0	0.25	27.0	2.25
x Sacrum	25.5	26.0	0.25	5.0	420.25
x p.Tibia	25.5	26.0	0.25	5.0	420.25
x Atl/Axis	25.5	26.0	0.25	27.0	2.25
x p.Hum.	25.5	26.0	0.25	27.0	2.25

Table 8.48

Table 8.49

LARGE MAMMAL

		IVC2ns	IVC1ns	d6
x	d.Hum.	1.0	5.0	16.00
x	d.Tibia	3.0	11.5	72.25
x	Man/Tth	3.0	11.5	72.25
x	Talus	3.0	11.5	72.25
x	d.Rad.	6.0	27.0	441.00
x	d.Scap.	6.0	5.0	1.00
x	p.Femur	6.0	1.5	20.25
x	Ribs	8.0	18.0	100.00
x	Acetab.	11.0	1.5	90.25
x	Os Mal.	11.0	11.5	0.25
x	p.Mt.	11.0	27.0	256.00
x	Calcan.	11.0	5.0	36.00
x	p.Rad.	11.0	11.5	0.25
x	Tarsal	14.0	27.0	169.00
x	Ph.2	15.0	16.0	1.00
x	Carpal	16.0	17.0	1.00
x	Ph.1	17.5	19.5	4.00
x	Ph.3	17.5	21.0	12.25
x	Vert.	19.0	15.0	16.00
x	Occiput	26.0	27.0	1.00
x	p.Mc.	26.0	11.5	210.25
x	d.Mt.	26.0	8.0	324.00
x	Max/Tth	26.0	27.0	1.00
x	d.Mc.	26.0	19.5	42.25
x	p.Ulna	26.0	27.0	1.00
x	d.Femur	26.0	27.0	1.00
x	Patella	26.0	27.0	1.00
x	Horncore	26.0	27.0	1.00
x	Sacrum	26.0	5.0	441.00
x	p.Tibia	26.0	5.0	441.00
x	Atl/Axis	26.0	27.0	1.00
x	p.Hum.	26.0	27.0	1.00

	R37 med.	lg.	d1	VII med.	lg.	d1	VI med.	lg.	d1	V med.	lg.	d1
x Horncore	2.0	6.5	20.25	7.0	31.0	576.00	2.0	20.0	324.00	16.0	29.0	169.00
x Occiput	25.5	27.5	4.00	20.0	17.5	6.25	23.0	28.0	25.00	16.0	5.0	121.00
x Man/Tth	1.0	6.5	30.25	1.0	2.0	1.00	1.0	10.0	81.00	1.0	2.5	2.25
x Max/Tth	16.5	27.5	121.00	2.0	6.5	20.25	2.0	13.5	132.25	11.0	13.5	6.25
x Atl/Axis	14.5	13.5	1.00	18.5	6.5	144.00	12.0	30.5	342.25	18.5	29.0	110.25
x Vert.	19.0	8.0	121.00	22.5	20.0	6.25	25.0	26.0	1.00	24.5	24.0	0.25
x Ribs	5.0	5.0	0.00	9.0	11.0	4.00	21.5	18.0	12.25	21.0	6.0	225.00
x Sacrum	25.5	1.0	600.25	25.0	25.5	0.25	28.5	23.0	30.25	27.0	29.0	4.00
x d.Scap.	3.0	13.5	110.25	4.0	21.0	289.00	12.0	23.0	121.00	18.5	20.0	2.25
x p.Hum.	23.0	27.5	20.25	28.0	29.5	2.25	19.0	32.0	169.00	22.5	29.0	42.25
x d.Hum.	10.5	13.5	9.00	3.0	13.5	110.25	3.0	6.5	12.25	3.0	13.5	110.25
x p.Ulna	20.5	27.5	49.00	15.0	19.0	16.00	17.0	10.0	49.00	7.5	20.0	156.25
x p.Rad.	9.0	27.5	342.25	8.0	9.5	2.25	7.0	10.0	9.00	9.5	20.0	110.25
x d.Rad.	14.5	2.5	144.00	13.5	25.5	144.00	15.0	25.0	100.00	12.5	29.0	272.25
x Carpal	29.0	18.5	110.25	26.5	9.5	289.00	31.0	19.0	144.00	30.0	20.0	100.00
x p.Mc.	6.0	13.5	56.25	10.0	3.0	49.00	18.0	8.0	100.00	14.0	9.5	20.25
x d.Mc.	12.5	4.0	72.25	21.0	12.0	81.00	16.0	2.0	196.00	22.5	20.0	6.25
x Acetab.	4.0	2.5	2.25	6.0	1.0	25.00	7.0	6.5	0.25	4.5	1.0	12.25
x p.Femur	12.5	27.5	225.00	13.5	13.5	0.00	14.0	13.5	0.25	4.5	29.0	600.25
x d.Femur	25.5	27.5	4.00	16.0	23.0	49.00	9.0	28.0	361.00	12.5	20.0	56.25
x Patella	25.5	27.5	4.00	29.5	29.5	0.00	24.0	30.5	42.25	24.5	20.0	20.25
x p.Tibia	20.5	13.5	49.00	24.0	27.5	12.25	28.5	28.0	0.25	16.0	29.0	169.00
x d.Tibia	7.0	13.5	42.25	11.5	17.5	36.00	7.0	15.5	72.25	7.5	13.5	36.00
x Os Mal.	31.5	27.5	16.00	29.5	27.5	4.00	26.0	23.0	9.00	31.5	8.0	552.25
x Talus	10.5	13.5	9.00	5.0	8.0	9.00	4.0	1.0	9.00	2.0	4.0	4.00
x Calcan.	18.0	13.5	20.25	18.5	4.0	210.25	10.0	4.0	36.00	9.5	13.5	16.00
x Tarsal	28.0	18.5	90.25	22.5	15.0	56.25	20.0	17.0	9.00	28.0	13.5	210.25
x p.Mt.	8.0	27.5	380.25	11.5	16.0	20.25	12.0	3.0	81.00	6.0	9.5	12.25
x d.Mt.	16.5	20.5	16.00	17.0	5.0	144.00	21.5	5.0	272.25	20.0	13.5	42.25
x Ph.1	22.0	20.5	2.25	26.5	22.0	20.25	27.0	12.0	225.00	26.0	2.5	552.25
x Ph.2	31.5	9.0	506.25	31.0	24.0	49.00	30.0	15.5	210.25	29.0	7.0	484.00
x Ph.3	30.0	22.0	64.00	32.0	32.0	0.00	32.0	21.0	121.00	31.5	25.0	42.25

Table 8.50-1

Table 8.50-2

	IVC2sc med.	lg.	d1	IVC2ns med.	lg.	d1	IVC1ns med.	lg.	d1
x Horncore	10.5	25.5	225.00	9.5	26	272.25	20.0	27.0	49.00
x Occiput	30.0	25.5	20.25	26.5	26	0.25	25.5	27.0	2.25
x Man/Tth	5.0	5.0	0.00	4.5	3.0	2.25	3.5	11.5	64.00
x Max/Tth	6.0	25.5	380.25	9.5	26	272.25	20.0	27.0	49.00
x Atl/Axis	15.5	25.5	100.00	20.5	26	30.25	12.5	27.0	210.25
x Vert.	22.0	8.0	196.00	20.5	19	2.25	17.5	15.0	6.25
x Ribs	12.0	7.0	25.00	18.0	8	100.00	17.5	18.0	0.25
x Sacrum	15.5	25.5	100.00	26.5	26	0.25	25.5	5.0	420.25
x d.Scap.	22.0	5.0	289.00	12.0	6	36.00	5.0	5.0	0.00
x p.Hum.	24.0	25.5	2.25	17.0	26	81.00	14.0	27.0	169.00
x d.Hum.	2.0	1.0	1.00	1.0	1	0.00	1.0	5.0	16.00
x p.Ulna	17.5	25.5	64.00	13.0	26	169.00	20.0	27.0	49.00
x p.Rad.	7.0	25.5	342.25	6.0	11	25.00	8.0	11.5	12.25
x d.Rad.	9.0	2.5	42.25	9.5	6	12.25	6.5	27.0	420.25
x Carpal	27.0	17.0	100.00	29.0	16	169.00	31.0	17.0	196.00
x p.Mc.	19.5	25.5	36.00	20.5	26	30.25	22.5	11.5	121.00
x d.Mc.	17.5	25.5	64.00	26.5	26	0.25	15.5	19.5	16.00
x Acetab.	4.0	11.5	56.25	4.5	11	42.25	2.0	1.5	0.25
x p.Femur	1.0	11.5	110.25	2.0	6	16.00	3.5	1.5	4.00
x d.Femur	8.0	25.5	306.25	9.5	26	272.25	12.5	27.0	210.25
x Patella	25.0	25.5	0.25	23.0	26	9.00	27.5	27.0	0.25
x p.Tibia	13.5	25.5	144.00	7.0	26	361.00	11.0	5.0	36.00
x d.Tibia	3.0	2.5	0.25	3.0	3	0.00	10.0	11.5	2.25
x Os Mal.	32.0	11.5	420.25	31.5	11	420.25	29.0	11.5	306.25
x Talus	13.5	5.0	72.25	20.5	3	306.25	6.5	11.5	25.00
x Calcan.	10.5	11.5	1.00	16.0	11	25.00	9.0	5.0	16.00
x Tarsal	29.0	15.0	196.00	26.5	14	156.25	27.5	27.0	0.25
x p.Mt.	19.5	11.5	64.00	14.5	11	12.25	15.5	27.0	132.25
x d.Mt.	22.0	25.5	12.25	14.5	26	132.25	22.5	8.0	210.25
x Ph.1	27.0	16.0	121.00	24.0	18	42.25	24.0	19.5	20.25
x Ph.2	27.0	11.5	240.25	30.0	15	225.00	30.0	16.0	196.00
x Ph.3	31.0	18.0	169.00	31.5	18	196.00	32.0	21.0	121.00

TABLE 8.51

Spearman's coefficients of rank-order correlation for skeletal parts computed from rankings listed in Tables 8.38-8.50

Temporal Unit:	R37	Yahya: VII	VI	V	IVC2sc	IVC2ns	IVC1sc
R37	0.41	0.86	0.72	0.69	0.66	0.68	0.71
Yahya: VII	0.18	-0.56	0.87	0.81	0.74	0.74	0.70
VI	0.15	0.64	-0.40	0.83	0.77	0.73	0.74
V	0.05	0.49	0.53	-0.22	0.80	0.82	0.81
IVC2sc	0.40	0.18	0.28	0.39	-0.29	0.87	0.80
IVC2ns	0.26	0.27	0.39	0.39	0.93	-0.37	0.82
IVC1ns	0.36	0.35	0.38	0.18	0.41	0.48	-0.44

Notes: values on the diagonal result from comparison of skeletal part frequency ranks for large vs. medium mammals within each temporal unit (Table 8.50);
values to upper right of diagonal result from comparison of skeletal part frequency ranks for medium mammals, temporal unit by temporal unit (Tables 8.38-8.43);
values to lower left of diagonal result from comparison of skeletal part frequency ranks for large mammals, temporal unit by temporal unit (Tables 8.44-8.49).

TABLE 8.52

Bone density data for sheep of various ages as computed by Binford and Bertram (1977: 109)

	Body Part	6 mo. Ovis	19 mo. Ovis	90 mo. Ovis	Average Ovis
1	Occiput	1.32	1.49	1.64	1.48
2	Mandible	1.40	1.51	1.76	1.56
3	Atlas	0.97	1.42	1.50	1.30
4	Axis	1.01	1.37	1.39	1.26
5	Cervical V	1.01	1.25	1.29	1.18
6	Thoracic V	0.98	1.28	1.37	1.21
7	Lumbar V	0.98	1.38	1.44	1.27
8	Acetabulum	1.03	1.34	1.71	1.36
9	Ribs	1.00	1.14	1.15	1.10
10	Sternum	0.58	0.59	0.62	0.60
11	Scapula	1.05	1.18	1.69	1.31
12	pr.Humerus	0.70	0.78	0.87	0.78
13	ds.Humerus	1.10	1.16	1.72	1.33
14	pr.Radius	1.03	1.27	1.65	1.32
15	ds.Radius	0.85	1.04	1.52	1.14
16	Carpals	0.76	1.09	1.41	1.09
17	pr.Metac.	0.79	1.26	1.30	1.12
18	ds.Metac.	0.94	0.96	1.35	1.08
19	pr.Femur	0.87	1.13	1.52	1.17
20	ds.Femur	1.00	1.07	1.21	1.09
21	pr.Tibia	0.91	1.03	1.54	1.16
22	ds.Tibia	0.87	1.15	1.69	1.24
23	Tarsals	0.84	1.12	1.54	1.17
24	Astrag.	0.81	1.11	1.53	1.15
25	Calcaneum	0.86	1.15	1.55	1.19
26	pr.Metat.	0.86	1.25	1.36	1.16
27	ds.Metat.	0.86	1.06	1.31	1.08
28	Phalanx 1	0.68	0.71	0.80	0.73
29	Phalanx 2	0.68	0.71	0.80	0.73
30	Phalanx 3	0.66	0.68	0.78	0.71

TABLES 8.53-8.60

Matrices comparing Tepe Yahya and Tepe Gaz Tavila-R37 medium mammal skeletal part frequency ranks with ranks based on bone density of sheep of different ages

See Chapter 8 for explanation; d# = square of differences between rank in immediately preceding column and rank recorded in first column with ranks; age of sheep noted at base of first column

Table 8.53

MEDIUM MAMMAL	DENSITY RANK	R37	d1	VII	d2	VI	d3	V	d4	IVC2sc	d5	IVC2ns	d6	IVC1ns	d7
x Occiput	2.0	21.5	380.3	17.0	225.0	20.0	324.0	13.5	132.3	25.0	529.0	22.0	400.0	22.0	400.0
x Man/Tth	1.0	1.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0	5.0	16.0	4.5	12.3	3.5	6.3
x Atl/Axis	9.5	13.5	16.0	15.5	36.0	10.0	0.3	15.5	36.0	13.0	12.3	17.5	64.0	12.5	9.0
x Vert.	9.5	17.0	56.3	19.5	100.0	21.0	132.3	21.0	132.3	18.0	72.3	17.5	64.0	17.5	64.0
x Ribs	7.5	4.0	12.3	7.0	0.3	18.5	121.0	18.0	110.3	10.0	6.3	15.0	56.3	17.5	100.0
x d.Scap.	4.0	2.0	4.0	3.0	1.0	10.0	36.0	15.5	132.3	18.0	196.0	10.0	36.0	5.0	1.0
x p.Hum.	23.0	20.0	9.0	24.0	1.0	16.0	49.0	19.5	12.3	20.0	9.0	14.0	81.0	14.0	81.0
x d.Hum.	3.0	9.5	42.3	2.0	1.0	2.0	1.0	3.0	0.0	2.0	1.0	1.0	4.0	1.0	4.0
x p.Rad.	6.0	8.0	4.0	6.0	0.0	5.0	1.0	8.5	6.3	6.0	0.0	6.0	0.0	8.0	4.0
x d.Rad.	18.0	13.5	20.3	11.5	42.3	13.0	25.0	10.5	56.3	8.0	100.0	8.5	90.3	6.5	132.3
x Carpal	22.0	24.0	4.0	22.5	0.3	25.0	9.0	25.0	9.0	22.0	0.0	24.0	4.0	25.0	9.0
x p.Mc.	21.0	5.0	256.0	8.0	169.0	15.0	36.0	12.0	81.0	15.5	30.3	17.5	12.3	19.5	2.3
x d.Mc.	11.0	11.5	0.3	18.0	49.0	14.0	9.0	19.5	72.3	14.0	9.0	22.0	121.0	15.5	20.3
x Acetab.	5.0	3.0	4.0	5.0	0.0	5.0	0.0	4.5	0.3	4.0	1.0	4.5	0.3	2.0	9.0
x p.Femur	13.5	11.5	4.0	11.5	4.0	12.0	2.3	4.5	81.0	1.0	156.3	2.0	132.3	3.5	100.0
x d.Femur	7.5	21.5	196.0	13.0	30.3	7.0	0.3	10.5	9.0	7.0	0.3	8.5	1.0	12.5	25.0
x p.Tibia	12.0	18.0	36.0	21.0	81.0	23.0	121.0	13.5	2.3	11.5	0.3	7.0	25.0	11.0	1.0
x d.Tibia	13.5	6.0	56.3	9.5	16.0	5.0	72.3	7.0	42.3	3.0	110.3	3.0	110.3	10.0	12.3
x Talus	20.0	9.5	110.3	4.0	256.0	3.0	289.0	2.0	324.0	11.5	72.3	17.5	6.3	6.5	182.3
x Calcan.	16.0	16.0	0.0	15.5	0.3	8.0	64.0	8.5	56.3	9.0	49.0	13.0	9.0	9.0	49.0
x Tarsal	19.0	23.0	16.0	19.5	0.3	17.0	4.0	23.0	16.0	24.0	25.0	22.0	9.0	23.0	16.0
x p.Mt.	16.0	7.0	81.0	9.5	42.3	10.0	36.0	6.0	100.0	15.5	0.3	11.5	20.3	15.5	0.3
x d.Mt.	16.0	15.0	1.0	14.0	4.0	18.5	6.3	17.0	1.0	18.0	4.0	11.5	20.3	19.5	12.3
x Ph.1	24.5	19.0	30.3	22.5	4.0	22.0	6.3	22.0	6.3	22.0	6.3	20.0	20.3	21.0	12.3
x Ph.2	24.5	26.0	2.3	25.0	0.3	24.0	0.3	24.0	0.3	22.0	6.3	25.0	0.3	24.0	0.3
x Ph.3	26.0	25.0	1.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0
6 mo. Ovis															
Sum of Squares			1342.5		1063.0		1345.0		1418.5		1412.0		1299.0		1252.5
Spearman's 'r'			0.54		0.64		0.54		0.52		0.52		0.56		0.57

MEDIUM MAMMAL	DEN-SITY RANK	R37	d1	VII	d2	VI	d3	V	d4	IVC2sc	d5	IVC2ns	d6	IVC1ns	d7
x Man/Tth	1.0	1.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0	5.0	16.0	4.5	12.3	3.5	6.3
x Occiput	2.0	21.5	380.3	17.0	225.0	20.0	324.0	13.5	132.3	25.0	529.0	22.0	400.0	22.0	400.0
x d.Hum.	3.0	9.5	42.3	2.0	1.0	2.0	1.0	3.0	0.0	2.0	1.0	1.0	4.0	1.0	4.0
x d.Scap.	4.0	2.0	4.0	3.0	1.0	10.0	36.0	15.5	132.3	18.0	196.0	10.0	36.0	5.0	1.0
x Acetab.	5.0	3.0	4.0	5.0	0.0	5.0	0.0	4.5	0.3	4.0	1.0	4.5	0.3	2.0	9.0
x p.Rad.	6.0	8.0	4.0	6.0	0.0	5.0	1.0	8.5	6.3	6.0	0.0	6.0	0.0	8.0	4.0
x Ribs	7.5	4.0	12.3	7.0	0.3	18.5	121.0	18.0	110.3	10.0	6.3	15.0	56.3	17.5	100.0
x d.Femur	7.5	21.5	196.0	13.0	30.3	7.0	0.3	10.5	9.0	7.0	0.3	8.5	1.0	12.5	25.0
x Atl/Axis	9.5	13.5	16.0	15.5	36.0	10.0	0.3	15.5	36.0	13.0	12.3	17.5	64.0	12.5	9.0
x Vert.	9.5	17.0	56.3	19.5	100.0	21.0	132.3	21.0	132.3	18.0	72.3	17.5	64.0	17.5	64.0
x d.Mc.	11.0	11.5	0.3	18.0	49.0	14.0	9.0	19.5	72.3	14.0	9.0	22.0	121.0	15.5	20.3
x p.Tibia	12.0	18.0	36.0	21.0	81.0	23.0	121.0	13.5	2.3	11.5	0.3	7.0	25.0	11.0	1.0
x p.Femur	13.5	11.5	4.0	11.5	4.0	12.0	2.3	4.5	81.0	1.0	156.3	2.0	132.3	3.5	100.0
x d.Tibia	13.5	6.0	56.3	9.5	16.0	5.0	72.3	7.0	42.3	3.0	110.3	3.0	110.3	10.0	12.3
x Calcan.	16.0	16.0	0.0	15.5	0.3	8.0	64.0	8.5	56.3	9.0	49.0	13.0	9.0	9.0	49.0
x p.Mt.	16.0	7.0	81.0	9.5	42.3	10.0	36.0	6.0	100.0	15.5	0.3	11.5	20.3	15.5	0.3
x d.Mt.	16.0	15.0	1.0	14.0	4.0	18.5	6.3	17.0	1.0	18.0	4.0	11.5	20.3	19.5	12.3
x d.Rad.	18.0	13.5	20.3	11.5	42.3	13.0	25.0	10.5	56.3	8.0	100.0	8.5	90.3	6.5	132.3
x Tarsal	19.0	23.0	16.0	19.5	0.3	17.0	4.0	23.0	16.0	24.0	25.0	22.0	9.0	23.0	16.0
x Talus	20.0	9.5	110.3	4.0	256.0	3.0	289.0	2.0	324.0	11.5	72.3	17.5	6.3	6.5	182.3
x p.Mc.	21.0	5.0	256.0	8.0	169.0	15.0	36.0	12.0	81.0	15.5	30.3	17.5	12.3	19.5	2.3
x Carpal	22.0	24.0	4.0	22.5	0.3	25.0	9.0	25.0	9.0	22.0	0.0	24.0	4.0	25.0	9.0
x p.Hum.	23.0	20.0	9.0	24.0	1.0	16.0	49.0	19.5	12.3	20.0	9.0	14.0	81.0	14.0	81.0
x Ph.1	24.5	19.0	30.3	22.5	4.0	22.0	6.3	22.0	6.3	22.0	6.3	20.0	20.3	21.0	12.3
x Ph.2	24.5	26.0	2.3	25.0	0.3	24.0	0.3	24.0	0.3	22.0	6.3	25.0	0.3	24.0	0.3
x Ph.3	26.0	25.0	1.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0
6 mo. Ovis															
Sum of Squares			1342.5		1063.0		1345.0		1418.5		1412.0		1299.0		1252.5
Spearman's 'r'			0.54		0.64		0.54		0.52		0.52		0.56		0.57

Table 8.54

Table 8.55

	MEDIUM MAMMAL	DEN-SITY RANK	R37	d1	VII	d2	VI	d3	V	d4	IVC2sc	d5	IVC2ns	d6	IVC1ns	d7
x	Man/Tth	1.0	1.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0	5.0	16.0	4.5	12.3	3.5	6.3
x	Occiput	2.0	21.5	380.3	17.0	225.0	20.0	324.0	13.5	132.3	25.0	529.0	22.0	400.0	22.0	400.0
x	Atl/Axis	3.0	13.5	110.3	15.5	156.3	10.0	49.0	15.5	156.3	13.0	100.0	17.5	210.3	12.5	90.3
x	Acetab.	4.0	3.0	1.0	5.0	1.0	5.0	1.0	4.5	0.3	4.0	0.0	4.5	0.3	2.0	4.0
x	Vert.	5.0	17.0	144.0	19.5	210.3	21.0	256.0	21.0	256.0	18.0	169.0	17.5	156.3	17.5	156.3
x	p.Rad.	6.0	8.0	4.0	6.0	0.0	5.0	1.0	8.5	6.3	6.0	0.0	6.0	0.0	8.0	4.0
x	p.Mc.	7.0	5.0	4.0	8.0	1.0	15.0	64.0	12.0	25.0	15.5	72.3	17.5	110.3	19.5	156.3
x	p.Mt.	8.0	7.0	1.0	9.5	2.3	10.0	4.0	6.0	4.0	15.5	56.3	11.5	12.3	15.5	56.3
x	d.Scap.	9.0	2.0	49.0	3.0	36.0	10.0	1.0	15.5	42.3	18.0	81.0	10.0	1.0	5.0	16.0
x	d.Hum.	10.0	9.5	0.3	2.0	64.0	2.0	64.0	3.0	49.0	2.0	64.0	1.0	81.0	1.0	81.0
x	d.Tibia	11.5	6.0	30.3	9.5	4.0	5.0	42.3	7.0	20.3	3.0	72.3	3.0	72.3	10.0	2.3
x	Calcan.	11.5	16.0	20.3	15.5	16.0	8.0	12.3	8.5	9.0	9.0	6.3	13.0	2.3	9.0	6.3
x	Ribs	13.0	4.0	81.0	7.0	36.0	18.5	30.3	18.0	25.0	10.0	9.0	15.0	4.0	17.5	20.3
x	p.Femur	14.0	11.5	6.3	11.5	6.3	12.0	4.0	4.5	90.3	1.0	169.0	2.0	144.0	3.5	110.3
x	Tarsal	15.0	23.0	64.0	19.5	20.3	17.0	4.0	23.0	64.0	24.0	81.0	22.0	49.0	23.0	64.0
x	Talus	16.0	9.5	42.3	4.0	144.0	3.0	169.0	2.0	196.0	11.5	20.3	17.5	2.3	6.5	90.3
x	Carpal	17.0	24.0	49.0	22.5	30.3	25.0	64.0	25.0	64.0	22.0	25.0	24.0	49.0	25.0	64.0
x	d.Femur	18.0	21.5	12.3	13.0	25.0	7.0	121.0	10.5	56.3	7.0	121.0	8.5	90.3	12.5	30.3
x	d.Mt.	19.0	15.0	16.0	14.0	25.0	18.5	0.3	17.0	4.0	18.0	1.0	11.5	56.3	19.5	0.3
x	d.Rad.	20.0	13.5	42.3	11.5	72.3	13.0	49.0	10.5	90.3	8.0	144.0	8.5	132.3	6.5	182.3
x	p.Tibia	21.0	18.0	9.0	21.0	0.0	23.0	4.0	13.5	56.3	11.5	90.3	7.0	196.0	11.0	100.0
x	d.Mc.	22.0	11.5	110.3	18.0	16.0	14.0	64.0	19.5	6.3	14.0	64.0	22.0	0.0	15.5	42.3
x	p.Hum.	23.0	20.0	9.0	24.0	1.0	16.0	49.0	19.5	12.3	20.0	9.0	14.0	81.0	14.0	81.0
x	Ph.1	24.5	19.0	30.3	22.5	4.0	22.0	6.3	22.0	6.3	22.0	6.3	20.0	20.3	21.0	12.3
x	Ph.2	24.5	26.0	2.3	25.0	0.3	24.0	0.3	24.0	0.3	22.0	6.3	25.0	0.3	24.0	0.3
x	Ph.3	26.0	25.0	1.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0
	19 mo. Ovis															
	Sum of Squares			1219.0		1096.0		1383.5		1371.5		1912.0		1882.5		1776.0
	Spearman's 'r'			0.58		0.63		0.53		0.53		0.35		0.36		0.39

	MEDIUM MAMMAL	DEN-SITY RANK	R37	d1	VII	d2	VI	d3	V	d4	IVC2sc	d5	IVC2ns	d6	IVC1ns	d7
x	Occiput	2.0	21.5	380.3	17.0	225.0	20.0	324.0	13.5	132.3	25.0	529.0	22.0	400.0	22.0	400.0
x	Man/Tth	1.0	1.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0	5.0	16.0	4.5	12.3	3.5	6.3
x	Atl/Axis	3.0	13.5	110.3	15.5	156.3	10.0	49.0	15.5	156.3	13.0	100.0	17.5	210.3	12.5	90.3
x	Vert.	5.0	17.0	144.0	19.5	210.3	21.0	256.0	21.0	256.0	18.0	169.0	17.5	156.3	17.5	156.3
x	Ribs	13.0	4.0	81.0	7.0	36.0	18.5	30.3	18.0	25.0	10.0	9.0	15.0	4.0	17.5	20.3
x	d.Scap.	9.0	2.0	49.0	3.0	36.0	10.0	1.0	15.5	42.3	18.0	81.0	10.0	1.0	5.0	16.0
x	p.Hum.	23.0	20.0	9.0	24.0	1.0	16.0	49.0	19.5	12.3	20.0	9.0	14.0	81.0	14.0	81.0
x	d.Hum.	10.0	9.5	0.3	2.0	64.0	2.0	64.0	3.0	49.0	2.0	64.0	1.0	81.0	1.0	81.0
x	p.Rad.	6.0	8.0	4.0	6.0	0.0	5.0	1.0	8.5	6.3	6.0	0.0	6.0	0.0	8.0	4.0
x	d.Rad.	20.0	13.5	42.3	11.5	72.3	13.0	49.0	10.5	90.3	8.0	144.0	8.5	132.3	6.5	182.3
x	Carpal	17.0	24.0	49.0	22.5	30.3	25.0	64.0	25.0	64.0	22.0	25.0	24.0	49.0	25.0	64.0
x	p.Mc.	7.0	5.0	4.0	8.0	1.0	15.0	64.0	12.0	25.0	15.5	72.3	17.5	110.3	19.5	156.3
x	d.Mc.	22.0	11.5	110.3	18.0	16.0	14.0	64.0	19.5	6.3	14.0	64.0	22.0	0.0	15.5	42.3
x	Acetab.	4.0	3.0	1.0	5.0	1.0	5.0	1.0	4.5	0.3	4.0	0.0	4.5	0.3	2.0	4.0
x	p.Femur	14.0	11.5	6.3	11.5	6.3	12.0	4.0	4.5	90.3	1.0	169.0	2.0	144.0	3.5	110.3
x	d.Femur	18.0	21.5	12.3	13.0	25.0	7.0	121.0	10.5	56.3	7.0	121.0	8.5	90.3	12.5	30.3
x	p.Tibia	21.0	18.0	9.0	21.0	0.0	23.0	4.0	13.5	56.3	11.5	90.3	7.0	196.0	11.0	100.0
x	d.Tibia	11.5	6.0	30.3	9.5	4.0	5.0	42.3	7.0	20.3	3.0	72.3	3.0	72.3	10.0	2.3
x	Talus	16.0	9.5	42.3	4.0	144.0	3.0	169.0	2.0	196.0	11.5	20.3	17.5	2.3	6.5	90.3
x	Calcan.	11.5	16.0	20.3	15.5	16.0	8.0	12.3	8.5	9.0	9.0	6.3	13.0	2.3	9.0	6.3
x	Tarsal	15.0	23.0	64.0	19.5	20.3	17.0	4.0	23.0	64.0	24.0	81.0	22.0	49.0	23.0	64.0
x	p.Mt.	8.0	7.0	1.0	9.5	2.3	10.0	4.0	6.0	4.0	15.5	56.3	11.5	12.3	15.5	56.3
x	d.Mt.	19.0	15.0	16.0	14.0	25.0	18.5	0.3	17.0	4.0	18.0	1.0	11.5	56.3	19.5	0.3
x	Ph.1	24.5	19.0	30.3	22.5	4.0	22.0	6.3	22.0	6.3	22.0	6.3	20.0	20.3	21.0	12.3
x	Ph.2	24.5	26.0	2.3	25.0	0.3	24.0	0.3	24.0	0.3	22.0	6.3	25.0	0.3	24.0	0.3
x	Ph.3	26.0	25.0	1.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0
	19 mo. Ovis															
	Sum of Squares			1219.0		1096.0		1383.5		1371.5		1912.0		1882.5		1776.0
	Spearman's 'r'			0.58		0.63		0.53		0.53		0.35		0.36		0.39

Table 8.56

	MEDIUM MAMMAL	DEN-SITY RANK	R37	d1	VII	d2	VI	d3	V	d4	IVC2sc	d5	IVC2ns	d6	IVC1ns	d7
x	Man/Tth	1.0	1.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0	5.0	16.0	4.5	12.3	3.5	6.3
x	d.Hum.	2.0	9.5	56.3	2.0	0.0	2.0	0.0	3.0	1.0	2.0	0.0	1.0	1.0	1.0	1.0
x	Acetab.	3.0	3.0	0.0	5.0	4.0	5.0	4.0	4.5	2.3	4.0	1.0	4.5	2.3	2.0	1.0
x	d.Scap.	4.5	2.0	6.3	3.0	2.3	10.0	30.3	15.5	121.0	18.0	182.3	10.0	30.3	5.0	0.3
x	d.Tibia	4.5	6.0	2.3	9.5	25.0	5.0	0.3	7.0	6.3	3.0	2.3	3.0	2.3	10.0	30.3
x	p.Rad.	6.0	8.0	4.0	6.0	0.0	5.0	1.0	8.5	6.3	6.0	0.0	6.0	0.0	8.0	4.0
x	Occiput	7.0	21.5	210.3	17.0	100.0	20.0	169.0	13.5	42.3	25.0	324.0	22.0	225.0	22.0	225.0
x	Calcan.	8.0	16.0	64.0	15.5	56.3	8.0	0.0	8.5	0.3	9.0	1.0	13.0	25.0	9.0	1.0
x	p.Tibia	9.5	18.0	72.3	21.0	132.3	23.0	182.3	13.5	16.0	11.5	4.0	7.0	6.3	11.0	2.3
x	Tarsal	9.5	23.0	182.3	19.5	100.0	17.0	56.3	23.0	182.3	24.0	210.3	22.0	156.3	23.0	182.3
x	Talus	11.0	9.5	2.3	4.0	49.0	3.0	64.0	2.0	81.0	11.5	0.3	17.5	42.3	6.5	20.3
x	p.Femur	12.0	11.5	0.3	11.5	0.3	12.0	0.0	4.5	56.3	1.0	121.0	2.0	100.0	3.5	72.3
x	d.Rad.	13.0	13.5	0.3	11.5	2.3	13.0	0.0	10.5	6.3	8.0	25.0	8.5	20.3	6.5	42.3
x	Atl/Axis	14.0	13.5	0.3	15.5	2.3	10.0	16.0	15.5	2.3	13.0	1.0	17.5	12.3	12.5	2.3
x	Carpal	15.0	24.0	81.0	22.5	56.3	25.0	100.0	25.0	100.0	22.0	49.0	24.0	81.0	25.0	100.0
x	Vert.	16.0	17.0	1.0	19.5	12.3	21.0	25.0	21.0	25.0	18.0	4.0	17.5	2.3	17.5	2.3
x	p.Mt.	17.0	7.0	100.0	9.5	56.3	10.0	49.0	6.0	121.0	15.5	2.3	11.5	30.3	15.5	2.3
x	d.Mc.	18.0	11.5	42.3	18.0	0.0	14.0	16.0	19.5	2.3	14.0	16.0	22.0	16.0	15.5	6.3
x	d.Mt.	19.0	15.0	16.0	14.0	25.0	18.5	0.3	17.0	4.0	18.0	1.0	11.5	56.3	19.5	0.3
x	p.Mc.	20.0	5.0	225.0	8.0	144.0	15.0	25.0	12.0	64.0	15.5	20.3	17.5	6.3	19.5	0.3
x	d.Femur	21.0	21.5	0.3	13.0	64.0	7.0	196.0	10.5	110.3	7.0	196.0	8.5	156.3	12.5	72.3
x	Ribs	22.0	4.0	324.0	7.0	225.0	18.5	12.3	18.0	16.0	10.0	144.0	15.0	49.0	17.5	20.3
x	p.Hum.	23.0	20.0	9.0	24.0	1.0	16.0	49.0	19.5	12.3	20.0	9.0	14.0	81.0	14.0	81.0
x	Ph.1	24.0	19.0	25.0	22.5	2.3	22.0	4.0	22.0	4.0	22.0	4.0	20.0	16.0	21.0	9.0
x	Ph.2	25.0	26.0	1.0	25.0	0.0	24.0	1.0	24.0	1.0	22.0	9.0	25.0	0.0	24.0	1.0
x	Ph.3	26.0	25.0	1.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0
	90 mo. Ovis															
	Sum of Squares			1426.0		1059.5		1000.5		983.0		1342.5		1129.5		885.0
	Spearman's 'r'			0.51		0.64		0.66		0.66		0.54		0.61		0.70

Table 8.57

	MEDIUM MAMMAL	DEN-SITY RANK	R37	d1	VII	d2	VI	d3	V	d4	IVC2sc	d5	IVC2ns	d6	IVC1ns	d7
x	Occiput	7.0	21.5	210.3	17.0	100.0	20.0	169.0	13.5	42.3	25.0	324.0	22.0	225.0	22.0	225.0
x	Man/Tth	1.0	1.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0	5.0	16.0	4.5	12.3	3.5	6.3
x	Atl/Axis	14.0	13.5	0.3	15.5	2.3	10.0	16.0	15.5	2.3	13.0	1.0	17.5	12.3	12.5	2.3
x	Vert.	16.0	17.0	1.0	19.5	12.3	21.0	25.0	21.0	25.0	18.0	4.0	17.5	2.3	17.5	2.3
x	Ribs	22.0	4.0	324.0	7.0	225.0	18.5	12.3	18.0	16.0	10.0	144.0	15.0	49.0	17.5	20.3
x	d.Scap.	4.5	2.0	6.3	3.0	2.3	10.0	30.3	15.5	121.0	18.0	182.3	10.0	30.3	5.0	0.3
x	p.Hum.	23.0	20.0	9.0	24.0	1.0	16.0	49.0	19.5	12.3	20.0	9.0	14.0	81.0	14.0	81.0
x	d.Hum.	2.0	9.5	56.3	2.0	0.0	2.0	0.0	3.0	1.0	2.0	0.0	1.0	1.0	1.0	1.0
x	p.Rad.	6.0	8.0	4.0	6.0	0.0	5.0	1.0	8.5	6.3	6.0	0.0	6.0	0.0	8.0	4.0
x	d.Rad.	13.0	13.5	0.3	11.5	2.3	13.0	0.0	10.5	6.3	8.0	25.0	8.5	20.3	6.5	42.3
x	Carpal	15.0	24.0	81.0	22.5	56.3	25.0	100.0	25.0	100.0	22.0	49.0	24.0	81.0	25.0	100.0
x	p.Mc.	20.0	5.0	225.0	8.0	144.0	15.0	25.0	12.0	64.0	15.5	20.3	17.5	6.3	19.5	0.3
x	d.Mc.	18.0	11.5	42.3	18.0	0.0	14.0	16.0	19.5	2.3	14.0	16.0	22.0	16.0	15.5	6.3
x	Acetab.	3.0	3.0	0.0	5.0	4.0	5.0	4.0	4.5	2.3	4.0	1.0	4.5	2.3	2.0	1.0
x	p.Femur	12.0	11.5	0.3	11.5	0.3	12.0	0.0	4.5	56.3	1.0	121.0	2.0	100.0	3.5	72.3
x	d.Femur	21.0	21.5	0.3	13.0	64.0	7.0	196.0	10.5	110.3	7.0	196.0	8.5	156.3	12.5	72.3
x	p.Tibia	9.5	18.0	72.3	21.0	132.3	23.0	182.3	13.5	16.0	11.5	4.0	7.0	6.3	11.0	2.3
x	d.Tibia	4.5	6.0	2.3	9.5	25.0	5.0	0.3	7.0	6.3	3.0	2.3	3.0	2.3	10.0	30.3
x	Talus	11.0	9.5	2.3	4.0	49.0	3.0	64.0	2.0	81.0	11.5	0.3	17.5	42.3	6.5	20.3
x	Calcan.	8.0	16.0	64.0	15.5	56.3	8.0	0.0	8.5	0.3	9.0	1.0	13.0	25.0	9.0	1.0
x	Tarsal	9.5	23.0	182.3	19.5	100.0	17.0	56.3	23.0	182.3	24.0	210.3	22.0	156.3	23.0	182.3
x	p.Mt.	17.0	7.0	100.0	9.5	56.3	10.0	49.0	6.0	121.0	15.5	2.3	11.5	30.3	15.5	2.3
x	d.Mt.	19.0	15.0	16.0	14.0	25.0	18.5	0.3	17.0	4.0	18.0	1.0	11.5	56.3	19.5	0.3
x	Ph.1	24.0	19.0	25.0	22.5	2.3	22.0	4.0	22.0	4.0	22.0	4.0	20.0	16.0	21.0	9.0
x	Ph.2	25.0	26.0	1.0	25.0	0.0	24.0	1.0	24.0	1.0	22.0	9.0	25.0	0.0	24.0	1.0
x	Ph.3	26.0	25.0	1.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0
	90 mo. Ovis															
	Sum of Squares			1426.0		1059.5		1000.5		983.0		1342.5		1129.5		885.0
	Spearman's 'r'			0.51		0.64		0.66		0.66		0.54		0.61		0.70

Table 8.58

	MEDIUM MAMMAL	DENSITY RANK	R37	d1	VII	d2	VI	d3	V	d4	IVC2sc	d5	IVC2ns	d6	IVC1ns	d7
x	Man/Tth	1.0	1.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0	5.0	16.0	4.5	12.3	3.5	6.3
x	Occiput	2.0	21.5	380.3	17.0	225.0	20.0	324.0	13.5	132.3	25.0	529.0	22.0	400.0	22.0	400.0
x	Acetab.	3.0	3.0	0.0	5.0	4.0	5.0	4.0	4.5	2.3	4.0	1.0	4.5	2.3	2.0	1.0
x	d.Hum.	4.0	9.5	30.3	2.0	4.0	2.0	4.0	3.0	1.0	2.0	4.0	1.0	9.0	1.0	9.0
x	p.Rad.	5.0	8.0	9.0	6.0	1.0	5.0	0.0	8.5	12.3	6.0	1.0	6.0	1.0	8.0	9.0
x	d.Scap.	6.0	2.0	16.0	3.0	9.0	10.0	16.0	15.5	90.3	18.0	144.0	10.0	16.0	5.0	1.0
x	Atl/Axis	7.0	13.5	42.3	15.5	72.3	10.0	9.0	15.5	72.3	13.0	36.0	17.5	110.3	12.5	30.3
x	d.Tibia	8.0	6.0	4.0	9.5	2.3	5.0	9.0	7.0	1.0	3.0	25.0	3.0	25.0	10.0	4.0
x	Vert.	9.0	17.0	64.0	19.5	110.3	21.0	144.0	21.0	144.0	18.0	81.0	17.5	72.3	17.5	72.3
x	Calcan.	10.0	16.0	36.0	15.5	30.3	8.0	4.0	8.5	2.3	9.0	1.0	13.0	9.0	9.0	1.0
x	p.Femur	11.5	11.5	0.0	11.5	0.0	12.0	0.3	4.5	49.0	1.0	110.3	2.0	90.3	3.5	64.0
x	Tarsal	11.5	23.0	132.3	19.5	64.0	17.0	30.3	23.0	132.3	24.0	156.3	22.0	110.3	23.0	132.3
x	p.Tibia	13.5	18.0	20.3	21.0	56.3	23.0	90.3	13.5	0.0	11.5	4.0	7.0	42.3	11.0	6.3
x	p.Mt.	13.5	7.0	42.3	9.5	16.0	10.0	12.3	6.0	56.3	15.5	4.0	11.5	4.0	15.5	4.0
x	Talus	15.0	9.5	30.3	4.0	121.0	3.0	144.0	2.0	169.0	11.5	12.3	17.5	6.3	6.5	72.3
x	d.Rad.	16.0	13.5	6.3	11.5	20.3	13.0	9.0	10.5	30.3	8.0	64.0	8.5	56.3	6.5	90.3
x	p.Mc.	17.0	5.0	144.0	8.0	81.0	15.0	4.0	12.0	25.0	15.5	2.3	17.5	0.3	19.5	6.3
x	Ribs	18.0	4.0	196.0	7.0	121.0	18.5	0.3	18.0	0.0	10.0	64.0	15.0	9.0	17.5	0.3
x	Carpal	19.5	24.0	20.3	22.5	9.0	25.0	30.3	25.0	30.3	22.0	6.3	24.0	20.3	25.0	30.3
x	d.Femur	19.5	21.5	4.0	13.0	42.3	7.0	156.3	10.5	81.0	7.0	156.3	8.5	121.0	12.5	49.0
x	d.Mc.	21.5	11.5	100.0	18.0	12.3	14.0	56.3	19.5	4.0	14.0	56.3	22.0	0.3	15.5	36.0
x	d.Mt.	21.5	15.0	42.3	14.0	56.3	18.5	9.0	17.0	20.3	18.0	12.3	11.5	100.0	19.5	4.0
x	p.Hum.	23.0	20.0	9.0	24.0	1.0	16.0	49.0	19.5	12.3	20.0	9.0	14.0	81.0	14.0	81.0
x	Ph.1	24.5	19.0	30.3	22.5	4.0	22.0	6.3	22.0	6.3	22.0	6.3	20.0	20.3	21.0	12.3
x	Ph.2	24.5	26.0	2.3	25.0	0.3	24.0	0.3	24.0	0.3	22.0	6.3	25.0	0.3	24.0	0.3
x	Ph.3	26.0	25.0	1.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0
	Sum of Squares			1362.0		1062.5		1111.5		1073.5		1507.5		1318.5		1122.0
	Spearman's 'r'			0.53		0.64		0.62		0.63		0.48		0.55		0.62

Table 8.59

	MEDIUM MAMMAL	DEN-SITY RANK	R37	d1	VII	d2	VI	d3	V	d4	IVC2sc	d5	IVC2ns	d6	IVC1ns	d7
x	Occiput	2.0	21.5	380.3	17.0	225.0	20.0	324.0	13.5	132.3	25.0	529.0	22.0	400.0	22.0	400.0
x	Man/Tth	1.0	1.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0	5.0	16.0	4.5	12.3	3.5	6.3
x	Atl/Axis	7.0	13.5	42.3	15.5	72.3	10.0	9.0	15.5	72.3	13.0	36.0	17.5	110.3	12.5	30.3
x	Vert.	9.0	17.0	64.0	19.5	110.3	21.0	144.0	21.0	144.0	18.0	81.0	17.5	72.3	17.5	72.3
x	Ribs	18.0	4.0	196.0	7.0	121.0	18.5	0.3	18.0	0.0	10.0	64.0	15.0	9.0	17.5	0.3
x	d.Scap.	6.0	2.0	16.0	3.0	9.0	10.0	16.0	15.5	90.3	18.0	144.0	10.0	16.0	5.0	1.0
x	p.Hum.	23.0	20.0	9.0	24.0	1.0	16.0	49.0	19.5	12.3	20.0	9.0	14.0	81.0	14.0	81.0
x	d.Hum.	4.0	9.5	30.3	2.0	4.0	2.0	4.0	3.0	1.0	2.0	4.0	1.0	9.0	1.0	9.0
x	p.Rad.	5.0	8.0	9.0	6.0	1.0	5.0	0.0	8.5	12.3	6.0	1.0	6.0	1.0	8.0	9.0
x	d.Rad.	16.0	13.5	6.3	11.5	20.3	13.0	9.0	10.5	30.3	8.0	64.0	8.5	56.3	6.5	90.3
x	Carpal	19.5	24.0	20.3	22.5	9.0	25.0	30.3	25.0	30.3	22.0	6.3	24.0	20.3	25.0	30.3
x	p.Mc.	17.0	5.0	144.0	8.0	81.0	15.0	4.0	12.0	25.0	15.5	2.3	17.5	0.3	19.5	6.3
x	d.Mc.	21.5	11.5	100.0	18.0	12.3	14.0	56.3	19.5	4.0	14.0	56.3	22.0	0.3	15.5	36.0
x	Acetab.	3.0	3.0	0.0	5.0	4.0	5.0	4.0	4.5	2.3	4.0	1.0	4.5	2.3	2.0	1.0
x	p.Femur	11.5	11.5	0.0	11.5	0.0	12.0	0.3	4.5	49.0	1.0	110.3	2.0	90.3	3.5	64.0
x	d.Femur	19.5	21.5	4.0	13.0	42.3	7.0	156.3	10.5	81.0	7.0	156.3	8.5	121.0	12.5	49.0
x	p.Tibia	13.5	18.0	20.3	21.0	56.3	23.0	90.3	13.5	0.0	11.5	4.0	7.0	42.3	11.0	6.3
x	d.Tibia	8.0	6.0	4.0	9.5	2.3	5.0	9.0	7.0	1.0	3.0	25.0	3.0	25.0	10.0	4.0
x	Talus	15.0	9.5	30.3	4.0	121.0	3.0	144.0	2.0	169.0	11.5	12.3	17.5	6.3	6.5	72.3
x	Calcan.	10.0	16.0	36.0	15.5	30.3	8.0	4.0	8.5	2.3	9.0	1.0	13.0	9.0	9.0	1.0
x	Tarsal	11.5	23.0	132.3	19.5	64.0	17.0	30.3	23.0	132.3	24.0	156.3	22.0	110.3	23.0	132.3
x	p.Mt.	13.5	7.0	42.3	9.5	16.0	10.0	12.3	6.0	56.3	15.5	4.0	11.5	4.0	15.5	4.0
x	d.Mt.	21.5	15.0	42.3	14.0	56.3	18.5	9.0	17.0	20.3	18.0	12.3	11.5	100.0	19.5	4.0
x	Ph.1	24.5	19.0	30.3	22.5	4.0	22.0	6.3	22.0	6.3	22.0	6.3	20.0	20.3	21.0	12.3
x	Ph.2	24.5	26.0	2.3	25.0	0.3	24.0	0.3	24.0	0.3	22.0	6.3	25.0	0.3	24.0	0.3
x	Ph.3	26.0	25.0	1.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0	26.0	0.0
	Sum of Squares			1362.0		1062.5		1111.5		1073.5		1507.5		1318.5		1122.0
	Spearman's 'r'			0.53		0.64		0.62		0.63		0.48		0.55		0.62

Table 8.60

PLATES

PLATE I

Bird bones from Tepe Yahya

Ia: Tool made from a (?) Cygnus olor ulna shaft from Tepe Yahya IVC.2 (Room 5, 1971 cleaning)

Ib: Domestic chicken (Gallus gallus domesticus) tarsometatarsus from Tepe Yahya VIB.2 (locus 1930, specimen no.136); probably intrusive

Plate I

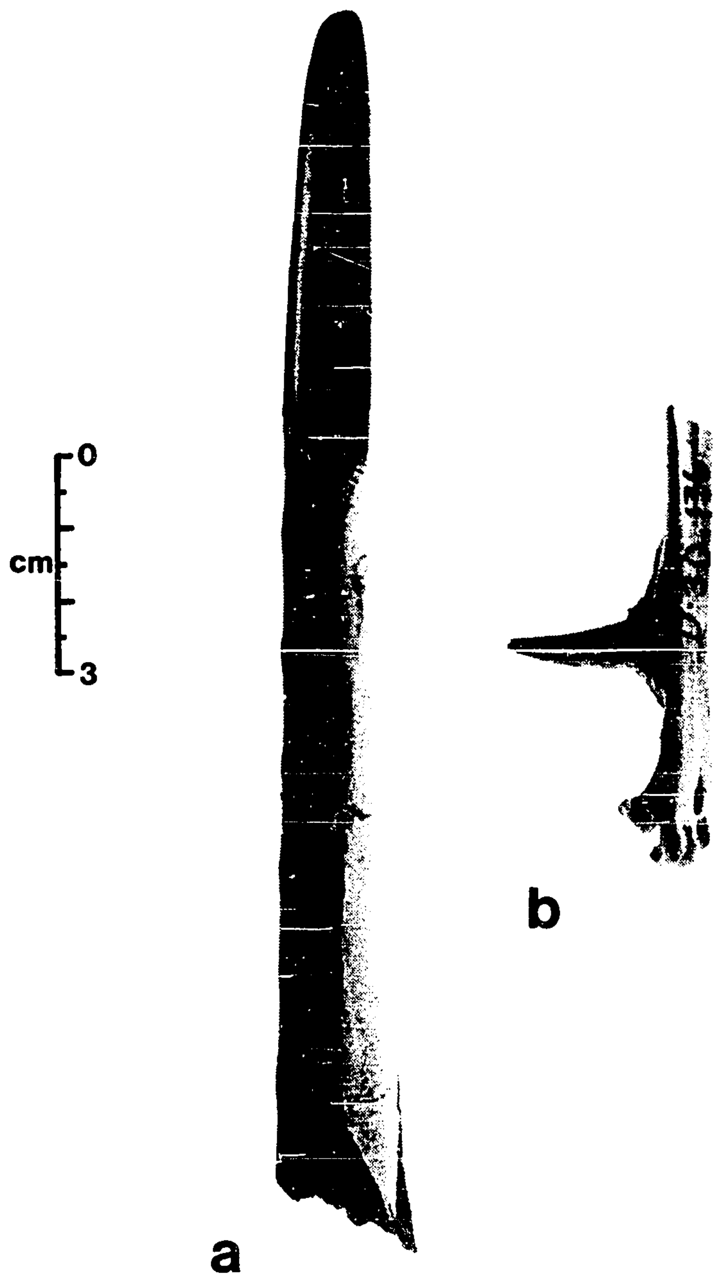


PLATE II

Canid bones from Tepe Yahya and Tepe Gaz Tavila-R37

IIa: Domestic dog (Canis familiaris) mandible from Tepe Yahya VIA
(locus 856, specimen no. 7)

IIb: Red fox (Vulpes vulpes) mandible from Tepe Gaz Tavila-R37
(locus 3529, specimen no. 4)

Plate II



a



b



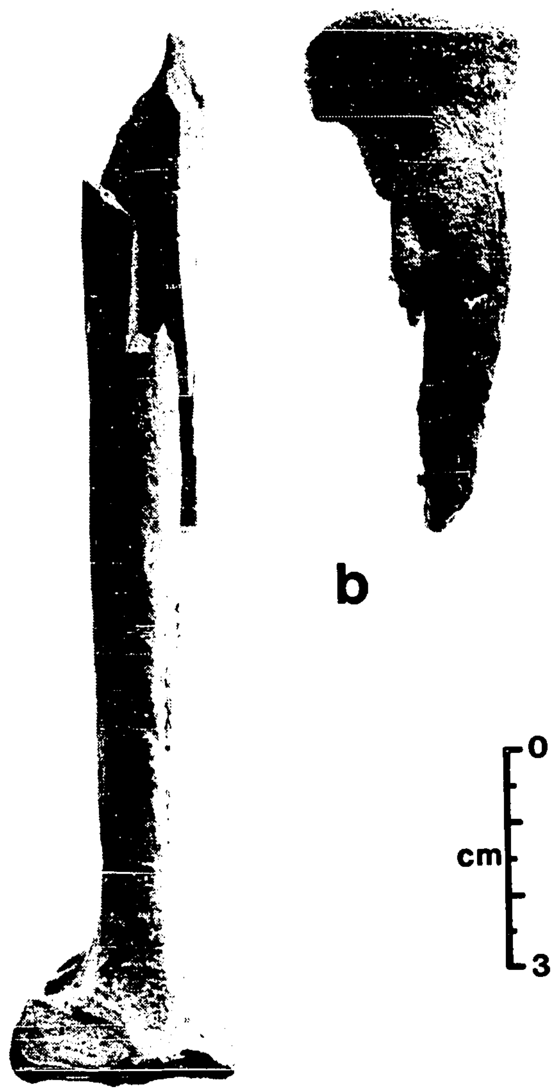
PLATE III

Bear and lion bones from Tepe Yahya

IIIa: Bear (? _Selenarctos thibetanus_) radius fragment from Tepe Yahya IVC.2 (locus 3761, specimen no. 50)

IIIb: Lion (_Panthera leo_) radius fragment from Tepe Yahya IVC.2 (locus 467, specimen no. 1)

Plate III



b

a

PLATE IV

Equid bones from Tepe Yahya

IVa: Hemione (*Equus hemionus*) radius from Tepe Yahya VIA (locus 1346, specimen no. 1)

IVb: Hemione (*Equus hemionus*) second phalanx from Tepe Yahya VIIB.2-VIA (locus 1936, specimen no. 41)

IVc: Hemione (*Equus hemionus*) tibia from Tepe Yahya VIIB.6-5 (locus 877, specimen no. 9)

IVd: Hemione (*Equus hemionus*) tibia from Tepe Yahya VIIB.2-VIIA (locus 1935, specimen no. 25)

Plate IV

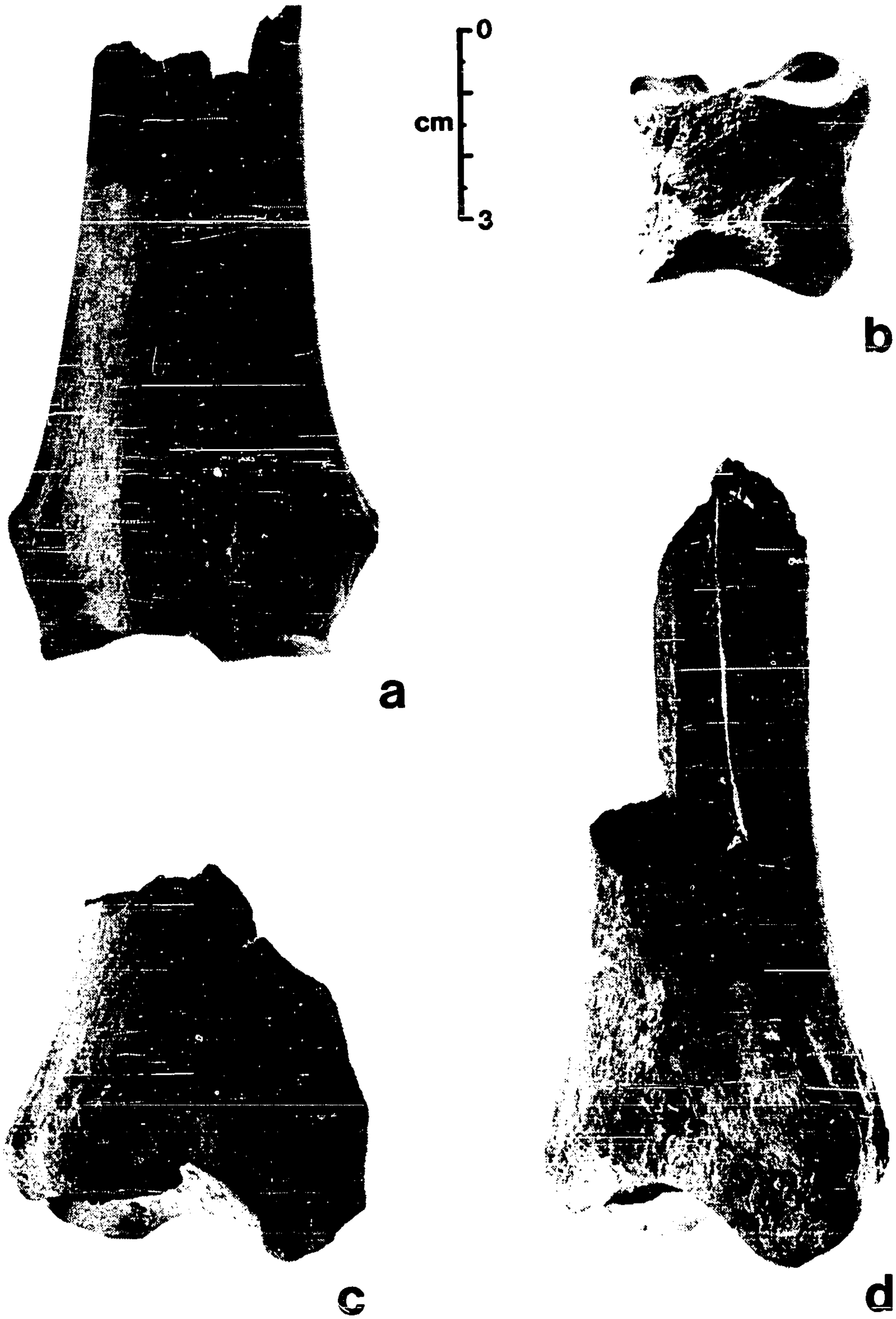


PLATE V

Equid bones from Tepe Yahya

Va: Hemione (Equus hemionus) metatarsal from Tepe Yahya VIB.2-1 (locus 1923, specimen no. 21)

Vb: Hemione (Equus hemionus) metatarsal from Tepe Yahya VIA (locus 1918, specimen no. 130)

Vc: Hemione (Equus hemionus) phalanx 1 from Tepe Yahya VIB.2 (locus 1932, specimen no. 35)

Vc: Hemione (Equus hemionus) phalanx 1 from Tepe Yahya VA.1 (locus 1932, specimen no. 35)

Plate V

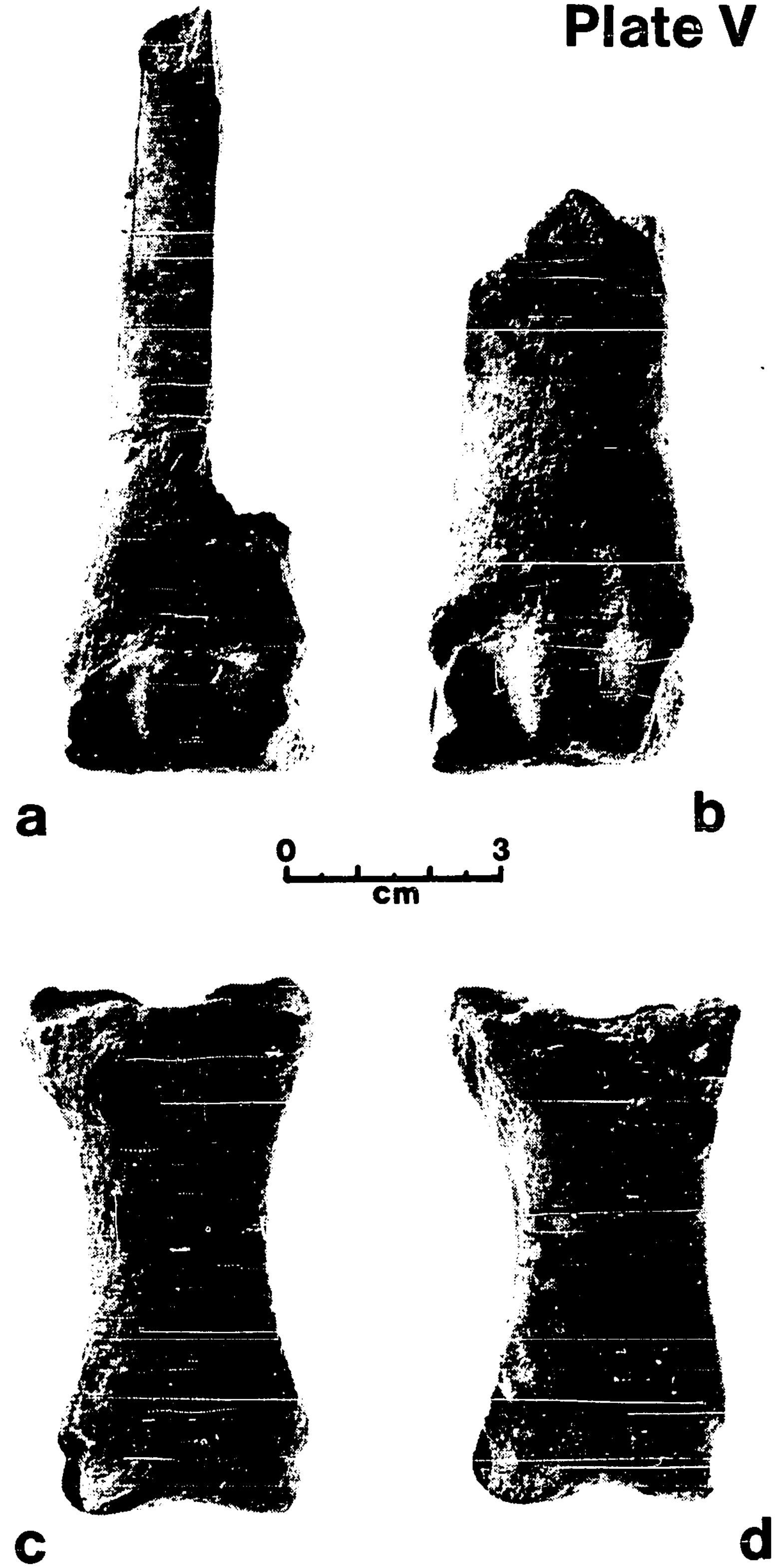


PLATE VI

Bos sp. orbital rims of zygomatic bones from Tepe Yahya and Bos indicus bifid vertebra from Tepe Gaz Tavila-R37

VIa: 2107-3; VIb: 186-1; VIc: 159-44; VId: 1343-10; VIe: 517-2;

VIf: 1941-3; VIg: 555-1; VIh: 3562-22

See Table 5.2 and text Section 5.2 for further discussion

Plate VI

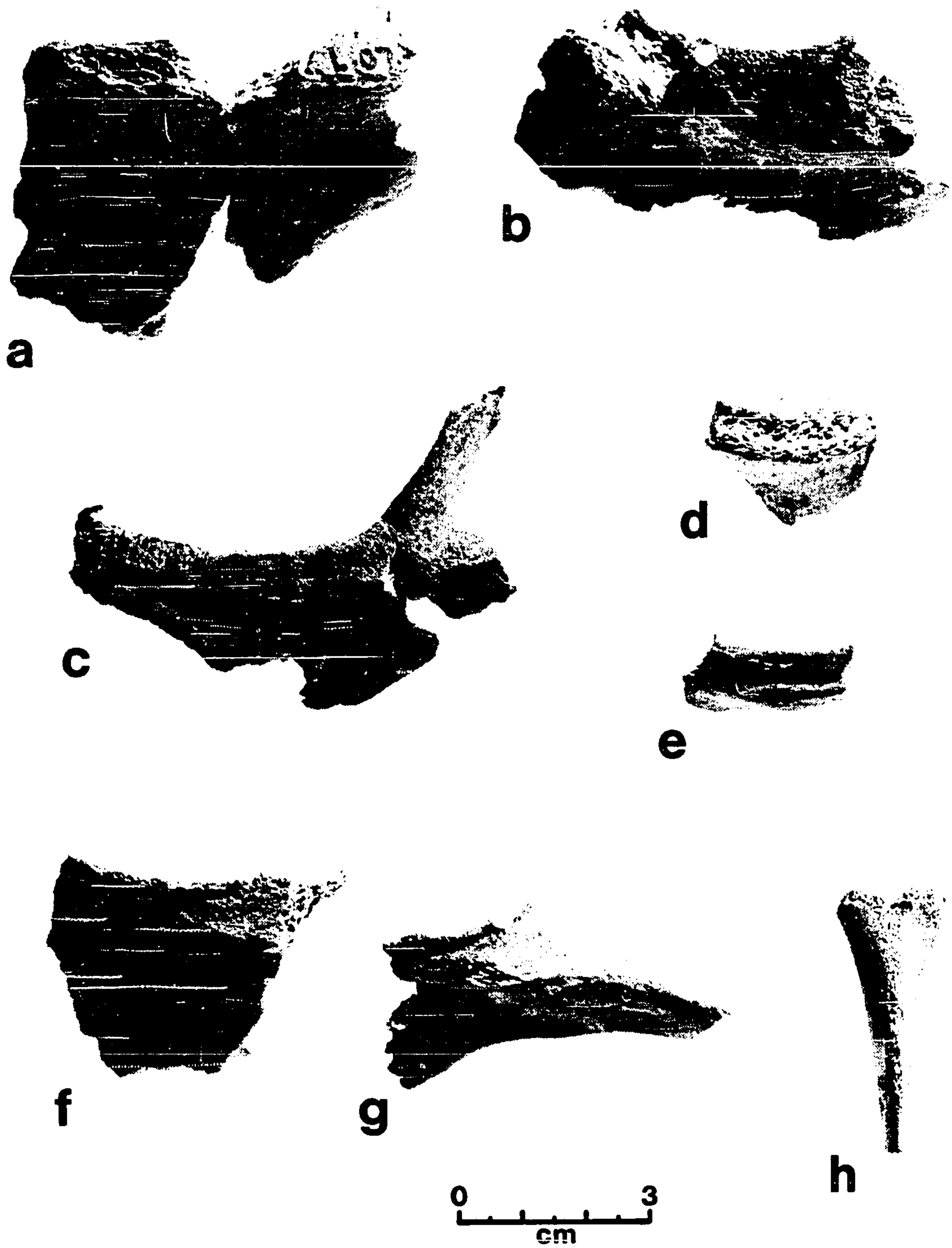


PLATE VII

Bos sp. orbital rims of zygomatic bones from Tepe Yahya

VIIa: 792-1; VIIb: 1914-13; VIIc: 1933-31; VIId: 159-46; VIIe: 212-1

See Table 5.2 and text Section 5.2 for further discussion

Plate VII

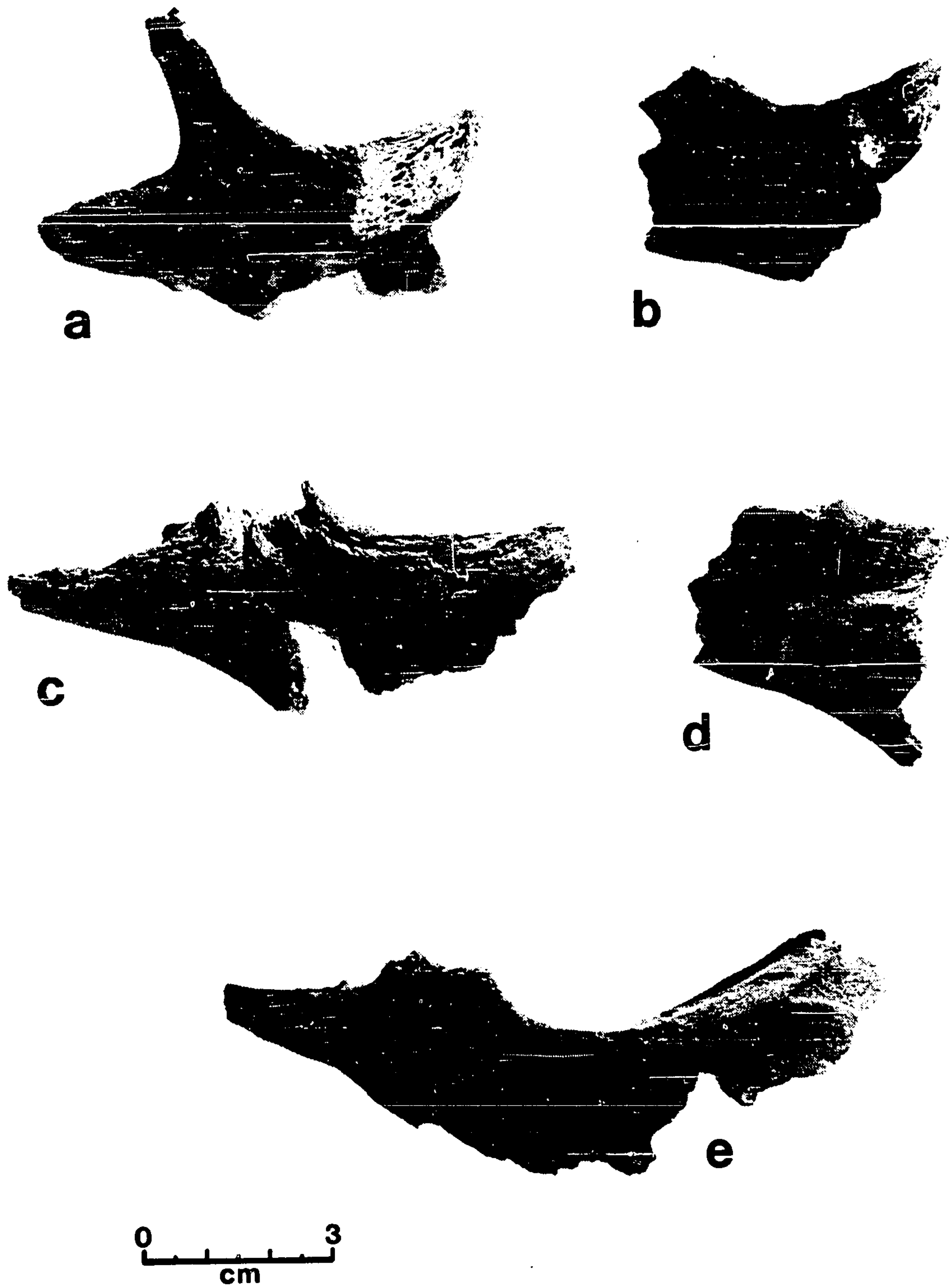


PLATE VIII

Young male *Gazella bennetti* reportedly captured in the Shah Maran-Daulatabad basin, summer, 1969



Plate VIII

PLATE IX

Male gazelle horncores from Tepe Yahya

IXa: 717-11; IXb: 1913-18; IXc: 286-6; see Table 5.8 for further data

Plate IX

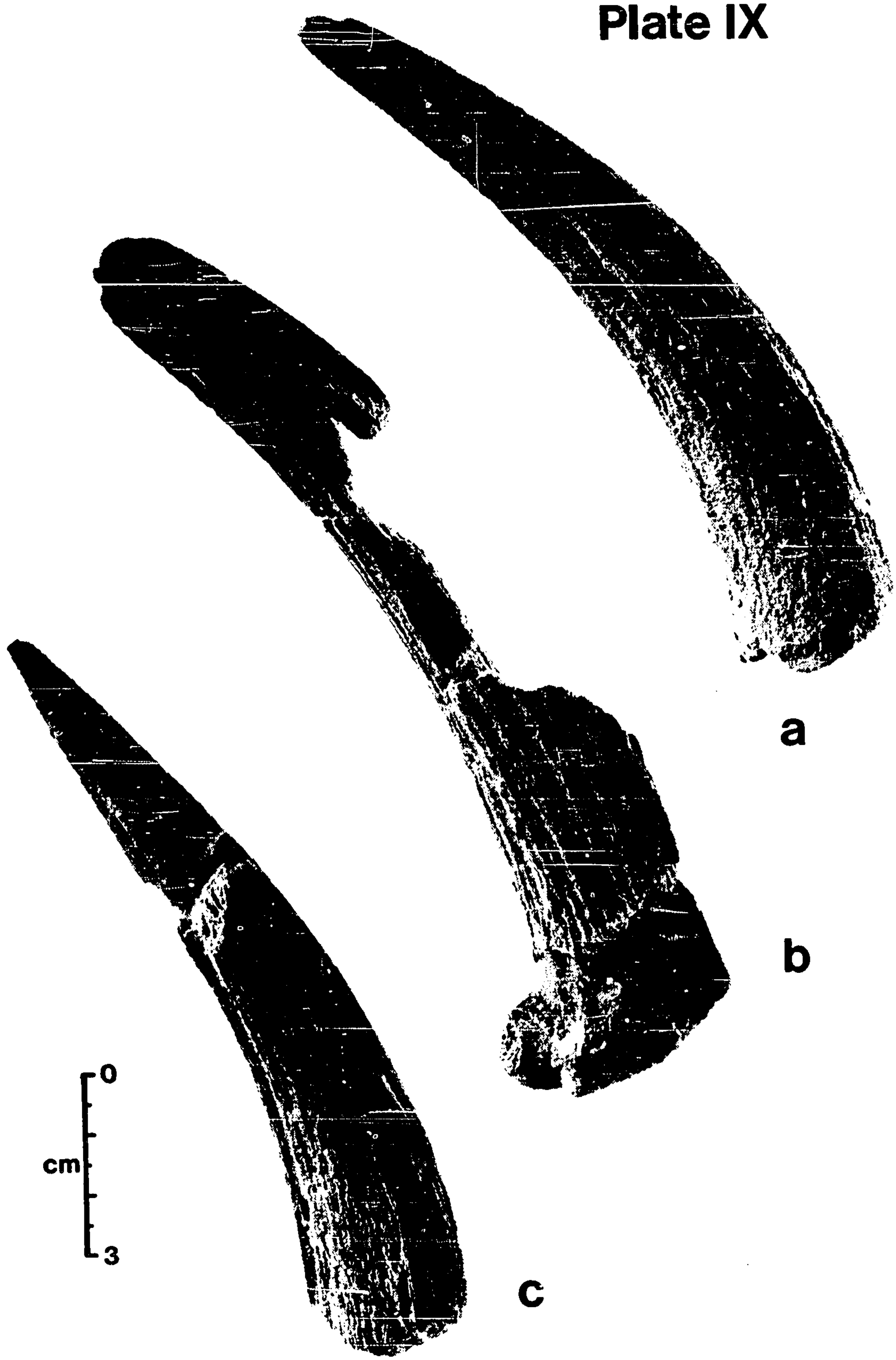


PLATE X

Female gazelle horncores and the cross-section of a male *Ovis orientalis* horncore, all from Tepe Yahya

Female gazelle horncores: Xa: 2126-30; Xb: 2118-11; see Table 5.8 for further data

Xc: Cross-section of male wild sheep horncore from Tepe Yahya VIB (locus 1932, specimen no. 19)
Note: anterior (nasal) margin is toward base of page!

Plate X

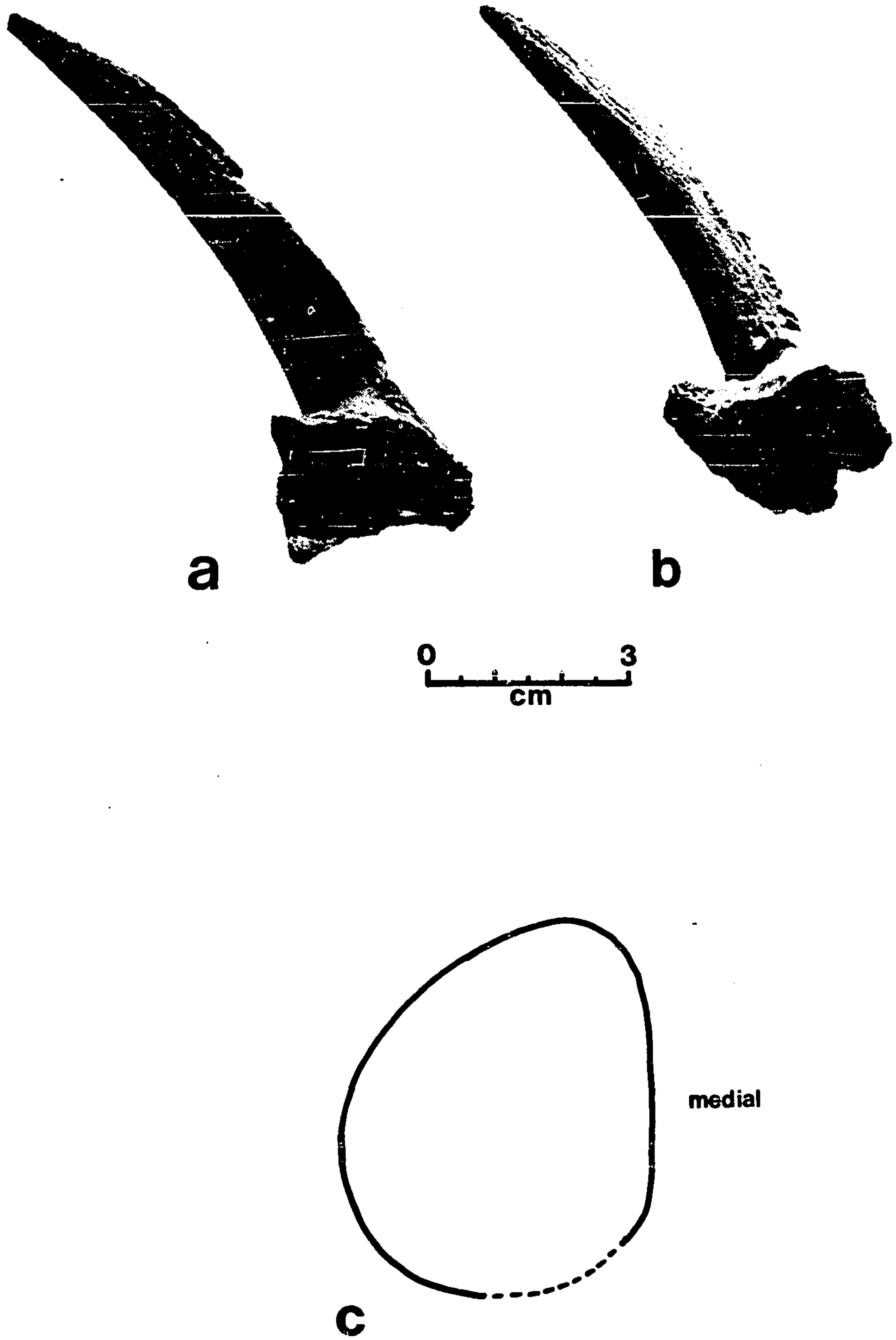


PLATE XI

Caprine horncores and frontal fragments from Tepe Yahya

XIa: Horncore of female domestic sheep (Capra hircus); arrow indicates level of terminus of hollow area of core; lines indicate location of cross-section; cross-section oriented with medial margin to right, anterior (nasal) margin to top; Tepe Yahya VA.1 (locus 1316, specimen no. 7).

XIb: Horncore of female caprine, identification uncertain; arrow shows level of terminus of hollow area of core; lines indicate location of cross-section; cross-oriented with medial margin to right, anterior (nasal) margin to top; Tepe Yahya IVC.2 (locus 3728, specimen no. 7).

XIc: Left frontal, parietal, temporal, and horn core base of domestic sheep (Ovis aries) to show absence of "dimple" in area indicated by arrow; Tepe Yahya IVC.2 (locus 3761, specimen no. 39)

XId: Left frontal and horn core base of domestic goat (Capra hircus) to show presence of "dimple" in area indicated by arrow; Tepe Yahya VIIB.6-3 (locus 2112, specimen no. 29)

Plate XI

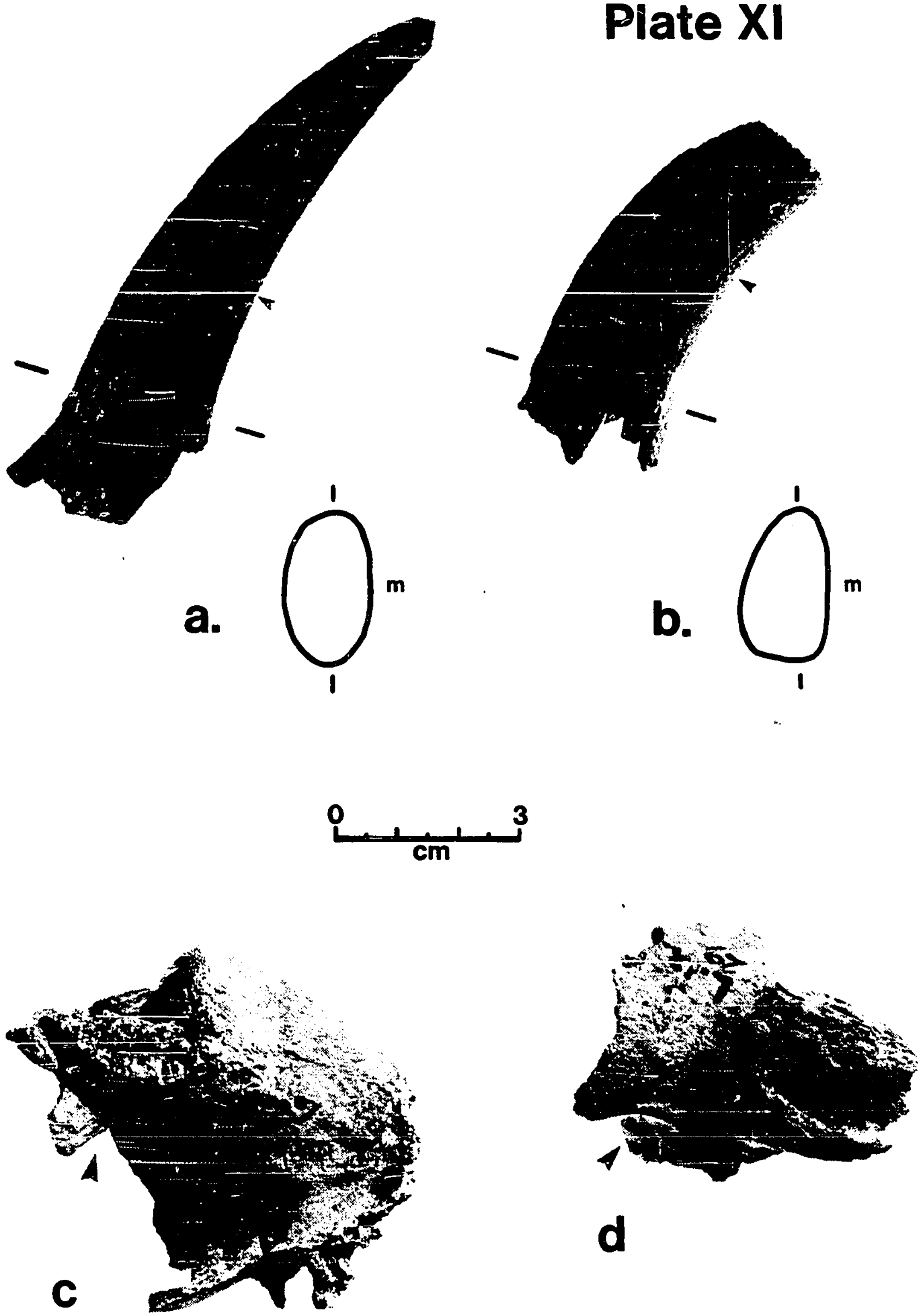


PLATE XII

Young male Ovis orientalis (wild sheep) photographed in Daulatabad village, summer, 1971

Plate XII



APPENDIX 1

BONE CODE

(from Meadow 1978)

reprinted from:
R.H. Meadow and M.A. Zeder, eds.
APPROACHES TO FAUNAL ANALYSIS
IN THE MIDDLE EAST
Peabody Museum Bulletin 2, 1978

"BONECODE" - A SYSTEM OF NUMERICAL CODING FOR FAUNAL DATA FROM MIDDLE EASTERN SITES

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Peabody Museum, Harvard University

Introduction

BONECODE is the end product of several years of designing and testing systems for the computer processing of faunal material from archaeological sites in the Middle East. Attaining its present form in 1975, the origins of the system reach back to a paper circulated in Budapest by Charles Reed in 1971. When, during the next three years, early versions of BONESORT and KNOCOD were circulated by their developers, features of each were selected for incorporation into what came to be known as BONECODE. The author is indebted to Richard Redding, Melinda Zeder, John McArdle, and Hans-Peter Uerpmann for making available copies of their codes, both now published in this volume in more developed form.

The Code

Like other coding systems, data input for BONESORT is based on the 80-column punch-card. In order, however, to accommodate a full range of attribute, measurement, and contextual information for each specimen, four different input formats were designed, each designated by a different number (1-4) in column 11 of the punch-card. The arrangement, labels, and names of the data fields for each of these format types are displayed in Table 1. Cross-referencing of input is accomplished by the first ten columns of the Post-cranial (1), Cranial (2), and Measurement (3) cards and by the first six columns of the Context (4) card. Each specimen analyzed is represented on at least one Cranial or Post-cranial card. One or more Measurement cards may or may not be present. Each group of specimens which come from the same site and archaeological context share a Context card thus eliminating the need to repetitiously code archaeological information.

Table 2 lists the possible states which each of the data fields (attributes) may assume along with the output codes used in the author's print programs. Notes on various of the data fields follow at this point.

BON (Bone ID Number). Generally specimens are numbered consecutively within a locus. Each separate find and not each element gets a different number unless a specimen with many elements (e.g., a jaw with many teeth or a skull fragment with more than one "bone") is to be coded using only the "Post-cranial" format (1). Specimens which articulate or are thought to do so are given consecutive numbers if possible. Radius and ulna when fused together but coded separately get consecutive numbers with the radius receiving the lower number.

ART (Articulation Code). Formats 1 and 2: For specimens which articulate or are thought to do so, the data card for the first is coded '2' and those for the others are given the appropriate code from '3' to '7'. Otherwise a '1' is entered in the field. Format 3: The codes from '1' to '9' together with the element identification code (ELM) define the nature of the set of measurements included on a given Measurement format (3) card. The field is coded '1' for post-cranial material. A skull, however, may require more than one measurement card.

ELM (Element Identification). When employing the Cranial format (2), the code '001' is marked except when fragmented specimens bearing teeth or when horncores or antlers are being recorded in which case the appropriate code from '016' to '023' is generally used.

ANM (Animal Identification). This list is prepared for use with mammalian fauna from the Middle East. The codes from '001' to '008' are used to classify unidentifiable bone finds and were adopted from Uerpmann's KNOCOD system (this volume). The list of taxa is drawn from Ellerman and Morrison-Scott (1966) and Lay (1967) with certain modifications based on more recent work with various groups such as the gazelles and the felids (Lange 1972 and Leyhausen 1975 respectively). In the case of both ELM and ANM, additions can be made so that the data fields are useable for coding remains of birds, fish, reptiles, and amphibians.

DOM (Domestication). There are basically three ways to distinguish wild from domestic animals from the macroscopic examination of bone finds. These are: 1) identifying bones as coming from taxa normally thought of as wild (e.g., gazelle, onager, mongoose); 2) using qualitative morphological attributes such as horncore shape; and 3) plotting measurements and noting differences in size and proportions of certain specimens. This coding field is used only for the first two approaches. Otherwise it is coded '0'.

SYM (Symmetry). Phalanges of artiodactyls can generally be distinguished as being either from the medial side of the right limb or the lateral side of the left limb or from the lateral side of the right limb or the medial side of the left limb. Thus the codes '4' and '5' are included.

AGE (Relative Age). This data field is adopted from KNOCOD. See Uerpmann's discussion of it in this volume as well as Bökönyi (1970).

SIZ (Relative Size). The various states within this field are determined subjectively within each age group. See Bökönyi (1970).

MOD (Modification). If multiple conditions are present on a specimen, code the highest applicable number from the list and note the others in the comment section.

PCS (Number of Pieces). This field is for recording the number of pieces included on a data card. The code '01' is employed unless multiple fragments are described together. The code '00' is used if a separate card has already been made out for another element to which this second element is attached.

ELS (Number of Elements). The number of elements included on one data card will equal the number of pieces unless a bone find is composed of more than one element (e.g., jaw with teeth, skull, ulna fused with radius and coded together). For a jaw with six teeth the number of pieces (PCS) is '01' and the number of elements (ELS) is '07'. For fragments which cannot be identified as to element, either '--' or '00' is coded in this field.

The Post-cranial and Cranial formats (1 and 2) are identical through input column 37. Thereafter they diverge. No special notes are required for the Cranial format.

FSZ (Fragment Size). This field is used to code the best estimate of the size of the specimen at the time of discard (except states '0' and '9').

END (Proximal/Distal). The categories noted here are self-evident when they apply to long bones. For such elements as the scapula, ilium, ischium, pubis, ulna, and calcaneum the user must define the areas of the bone to which these terms refer or add to the list of states published here.

PRF, DSF, PPF, SHF, PAP, PML, DAP, DML (Fracture characterization). The data fields for Fracture Type (PRF and DSF), Position of Primary Fracture (PPF) and Position of Fracture: Shaft (SHF) are used only in describing ancient breaks on long bones. They are abstracted from the work of Hind Sadek-Kooros (1966, 1972, 1975) which should be referred to before attempting to use these categories. The term 'anterior' is used here to refer to the 'cranial' or 'dorsal' aspect of a piece while the term 'posterior' designates the 'caudal' or 'volar' or 'plantar' aspect. The fields SHF and PAP can also be used to describe more completely fragmentation of the pelvis and the scapula.

TTY-TWR (fields for loose teeth). Loose teeth are coded using the 'Post-cranial' format (1). Wear categories are the same as those used in the Cranial format (2). The wear stages defined by Payne (1973) for sheep and goat mandibles are illustrated in Figure 1 together with their corresponding input and output codes.

The Measurement format (3) data fields coincide with those of formats 1 and 2 through column 15 (ELM). Thereafter, each block of five columns is used to record a separate modifier and measurement, with up to twelve measurements per card. The qualifier codes are defined as follows:

1 measurement taken
2 measurement estimated
3 measurement influenced by pathology
4 see comment
5 end measured is not fused.

The individual dimensions to which each of the twelve measurement fields refer for any given element are not defined here. Field definitions such as those made by Uerpmann for KNOCOD (this volume) can be used.

The Context format (4) coding fields and states were defined with the assistance of Thomas W. Beale specifically for use with the archaeological collections from Middle Eastern mound or *tell* sites. They require no special comment.

TABLE 1. BONECODE input format (80-column punch-card)

POSTCRANIAL	CRANIAL		MEASUREMENT	CONTEXT
SIT=site identification number	SIT	01	SIT	SIT
		02		
		03		
LOC=locus identification number	LOC	04	LOC	LOC
		05		
		06		
		07		SMJ=square - major division
BON=bone identification number	BON	08	BON	
		09		SMN=square - minor division
		10		
FRM=input format code (1)	FRM=input format code (2)	11	FRM=input format code (3)	FRM=input format code (4)

POSTCRANIAL	CRANIAL		MEASUREMENT
ART=articulation code	ART	12	ART=measurement group
		13	
ELM=ID as to element	ELM	14	ELM
		15	
		16	MD1=modifier #1
ANM=ID as to taxon	ANM	17	
		18	MS1=measurement #1 (###.# millimeters)
DOM=domestication state	DOM	19	
CER=certainty of ID	CER	20	
SYM=symmetry (rt./lft.)	SYM	21	MD2
SEX=sex determination	SEX	22	
AGE=age stage estimate	AGE	23	MS2
SIZ=relative size	SIZ	24	
DIS=pathology (disease)	DIS	25	
BUR=burning traces	BUR	26	MD3
MOD=bone modification	MOD	27	
FRG=fragmentation	FRG	28	MS3
PCS=number of pieces=01 unless grouped	PCS	29	
		30	
ELS=number of elements (6 teeth + 1 jaw = 7)	ELS	31	MD4
		32	
		33	MS4
WGT=weight to nearest half gram (###.#)	WGT	34	
		35	
		36	MD5
COM=comment	COM	37	
FSZ=fragment size	RHC=rt.horncore(antler)	38	MS5
END=proximal/distal	LHC=lft.horncore(antler)	39	
	FRN=frontal	40	
FUS=state of fusion	PAR=parietal	41	MD6
	INP=interparietal	42	
PRF=prox.fracture type	OCC=occipital	43	MS6
DSF=dist.fracture type	BAS=basio-occipital	44	
PPF=position prim.fract.	SPH=sphenoid	45	
SHF=position of fracture (shaft or dors/vent)	PTR=pterygoid	46	MD7
	PRT=petrous	47	
PAP=prox.fracture(A/P)	TEM=temporal	48	MS7
PML=prox.fracture(M/L)	VOM=vomer	49	
DAP=dist.fracture(A/P)	PAL=palatine	50	
DML=dist.fracture(M/L)	ZYG=zygomatic	51	MD8
CAP=cuts on shaft A/P	LAC=lacrimal	52	
CML=cuts on shaft M/L	NAS=nasal	53	MS8
CPA=cuts on prox.end A/P	MAX=maxillary	54	
CPM=cuts on prox.end M/L	PMX=premaxillary	55	
CDA=cuts on dist.end A/P	AMN=mandible-anterior	56	MD9
CDM=cuts on dist.end M/L	PMN=mandible-posterior	57	
TTY=tooth type	CUT=cuts	58	MS9
TCL=tooth class		59	
TNO=tooth number	WI1=wear of incisor #1	60	
TRT=tooth root	WI2=wear of incisor #2	61	MD10
TWR=tooth wear	WI3=wear of incisor #3	62	
	WCN=wear of canine	63	MS10
blank	WP1=wear of premolar #1	64	
	WP2=wear of premolar #2	65	
comment	WP3=wear of premolar #3	66	MD11
		67	
	WP4=wear of premolar #4	68	MS11
		69	
	WM1=wear of molar #1	70	
		71	MD12
	WM2=wear of molar #2	72	
		73	MS12
	WM3=wear of molar #3	74	
		75	
	comment	76	comment
		77	
		78	
		79	
		80	

CONTEXT

- YRE=year of excavation (last two digits)
- TMJ=test trench - major
- TMN=test trench - minor
- LMJ=stratum (level) - major division
- LMN=stratum - minor
- FMJ=feature - major division
- FMN=feature - minor
- FFF=floor/feature/fill
- INX=interior/exterior
- ICX=interior context
- ECX=exterior context
- FIL=fill description
- QAL=context quality
- RCV=recovery type
- SAM=same context as (4-digit locus no.)
- CTM=contemporary context (4-digit locus no.)
- EAR=immediately earlier context (4-digit locus no.)
- LAT=immediately later context (4-digit locus no.)
- PR1=period of occupation #1
- PH1=phase of occupation #1
- SB1=subphase of occupation #1
- PR2=period of occupation #2 (inclusive)
- PH2=phase of occupation #2 (inclusive)
- SB2=subphase of occupation #2
- SCH=site characteriz.
- THO=thousand years
- HUN=hundred years
- BAC=B.C./A.C.
- CMN=comment follows
- blank
- comment

Acknowledgment

Besides those persons mentioned in the text, I owe a debt of gratitude to Barbara Lawrence for giving good advice during the development of BONE-CODE.

References

Bökönyi, S.
1970 "A new method for the determination of the number of individuals in animal bone material," *American Journal of Archaeology*, vol. 74, pp. 291-292.

Ellerman, J.R. and T.C.S. Morrison-Scott
1966 *Checklist of Palaearctic and Indian Mammals, 1758 to 1946.* Second edition. London.

Lange, J.
1972 "Studien an Gazellenschädeln. Ein Beitrag zur Systematik der kleineren Gazellen, *Gazella* (De Blainville, 1816), *Säugetierkundliche Mitteilungen*, vol. 20, pp. 193-249.

Lay, D.M.
1967 *A Study of the Mammals of Iran.* Fieldiana: Zoology, vol. 54.

Leyhausen, P.
1975 *Verhaltensstudien an Katzen.* Vierte Auflage. Berlin.

Payne, S.
1973 "Kill-off patterns in sheep and goats: the mandibles from Aşvan Kale," *Anatolian Studies*, vol. 23, pp. 281-303.

Reed, C.A.
1971 "New method for recording and analyzing faunal material from archaeological sites," manuscript circulated at the Section on Animal Domestication of the Third International Congress of the Museums of Agriculture at Budapest, 19-23 April, 1971.

Sadek-Kooros, H.
1966 "Jaguar Cave: an Early Man Site in the Beaverhead Mountains of Idaho." Ph.D. dissertation, Harvard University.
1972 "Primitive bone fracturing: a method of research," *American Antiquity*, vol. 37, pp. 369-382.
1975 "Intentional fracturing of bone: description of criteria," in A.T. Clason, editor, *Archaeozoological Studies*, pp. 139-150. Amsterdam/New York.

TABLE 2. BONECODE input and output codes

SIT Site ID Number (input columns 1-2) [all formats]

input	output	
01	SITE NAME (16 letters maximum in heading of each report)	
-		
99		

LOC Locus ID Number (input columns 3-6) [all formats]

input	output
0001	0001
-	-
-	-
9999	9999

BON Bone ID Number (input columns 7-10) [formats 1, 2, and 3]

input	output
0001	0001
-	-
-	-
9999	9999

FRM Input Format Code (input column 11) [all formats]

input	output	
1	1	post-cranial
2	2	cranial
3	3	measurement
4	4	locus/context

ART Articulation Code (input column 12) [formats 1 and 2]

input	output	
1	1	(unless below)
2	2	see succeeding specimen(s)
3	3	fused with preceding
4	4	articulated with preceding, weighed together
5	5	articulated with preceding, weighed separately
6	6	probably articulated
7	7	possibly articulated

ELM Element Identification (input columns 13-15)

input	output	
---	N.A.	not applicable
000	????	indeterminate
001	SKULL	skull
002	BASIO	basioccipital
003	OCCIP	occipital
004	SPHEN	sphenoid
005	PTERY	pterygoid
006	VOMER	vomer
007	PALAT	palatine
008	INPAR	interparietal
009	PARIE	parietal
010	FRONT	frontal
011	PETRS	petrous
012	TEMPR	temporal
013	ZYGOM	zygomatic
014	LACRI	lacrimal
015	NASAL	nasal
016	PMX/T	premaxillary with teeth
017	PMX	premaxillary without teeth
018	MAX/T	maxillary with teeth
019	MAX	maxillary without teeth
020	MAN/T	mandible with teeth
021	MAN	mandible without teeth
022	HORN	horn core
023	ANTLR	antler
024	HYOID	hyoid
025	G.VER	general vertebra(e)
026	ATLAS	atlas
027	AXIS	axis
028	CERV	cervical vertebra
029	THOR	thoracic vertebra
030	LUMB	lumbar vertebra
031	SACR	sacrum
032	CAUD	caudal vertebra
033	RIB	rib
034	COST	costal cartilage
035	STERN	sternebra
036	SCAP	scapula
037	CLAV	clavicle
038	HUMER	humerus
039	RAD	radius
040	ULNA	ulna
041	CARPL	carpal
042	C-RAD	radial carpal [except carnivores]
043	C-INT	intermediate carpal [except carnivores]
044	C-ULN	ulnar carpal
045	C-ACC	accessory carpal
046	C-1	first carpal [inconstant in equids. e.g. suids, canids, felids]
047	C-2	second carpal [e.g. equids, suids, canids, felids]
048	C-3	third carpal [same as C-2]
049	C-4	fourth carpal
050	C-R+I	radial + intermediate carpal [e.g. carnivores]
051	C-2+3	second + third carpal [e.g. ruminants]
052	MC 1	metacarpal I
053	MC 2	metacarpal II
054	MC 3	metacarpal III
055	MC 4	metacarpal IV
056	MC 5	metacarpal V
057	MC3+4	metacarpal III + IV [ruminants]
058	MC ?	indeterminate metacarpal
059	SESAP	anterior proximal sesamoid
060	SESAD	anterior distal sesamoid
061	SESAN	anterior sesamoid
062	PH1AN	anterior phalanx 1
063	PH2AN	anterior phalanx 2
064	PH3AN	anterior phalanx 3
065	PH?AN	anterior phalanx
066	PELV	pelvis [ilium + ischium + pubis]
067	IL/IS	ilium + ischium

ELM Element Identification [continued]

input	output	
068	IL/PB	ilium + pubis
069	IS/PB	ischium + pubis
070	ILIUM	ilium
071	ISCH	ischium
072	PUBIS	pubis
073	PENIS	penis bone [e.g. carnivores]
074	FEMUR	femur
075	PATEL	patella
076	TIBIA	tibia
077	FIBUL	fibula
078	MALL	lateral malleolus
079	TALUS	astragalus (talus)
080	CALC	calcaneus
081	TARSL	tarsal
082	T-CEN	central tarsal [e.g. equids, suids, canids, felids]
083	T-1	first tarsal [occ. sep. in equids]
084	T-2	second tarsal [occ. sep. in equids; as with T-CEN]
085	T-3	third tarsal [as with T-CEN]
086	T-4	fourth tarsal [as with T-CEN]
087	T-C+4	central + fourth tarsal [e.g. ruminants]
088	T-1+2	first + second tarsal [e.g. equids, usually]
089	T-2+3	second + third tarsal [e.g. ruminants]
090	MT 1	metatarsal I
091	MT 2	metatarsal II
092	MT 3	metatarsal III
093	MT 4	metatarsal IV
094	MT 5	metatarsal V
095	MT3+4	metatarsal III + IV [ruminants]
096	MT ?	indeterminate metatarsal
097	SESPP	posterior proximal sesamoid
098	SESPD	posterior distal sesamoid
099	SESPS	posterior sesamoid
100	PH1PS	posterior phalanx 1
101	PH2PS	posterior phalanx 2
102	PH3PS	posterior phalanx 3
103	PH?PS	posterior phalanx
104	MP3+4	metapodial III + IV
105	MP ?	indeterminate metapodial
106	SES.P	proximal sesamoid
107	SES.D	distal sesamoid
108	SES.	sesamoid
109	PH1	phalanx 1
110	PH2	phalanx 2
111	PH3	phalanx 3
112	PH?	phananx
113	TTHUP	loose tooth: upper
114	TTHLW	loose tooth: lower
115	HM/FR	humerus or femur fragment
116	LG.BN	long bone fragment
117	????	indeterminate fragment
118	TTHND	tooth fragment
119		
120		
.		
.		
.		

ANM Animal Identification (input columns 16-18) [Formats 1 and 2]

input	output	
000	???	indeterminate
001	SMALL	smaller than rabbit-sized
002	SM-MD	rabbit-sized to medium dog-sized
003	MED.1	medium dog-sized to medium sheep-sized
004	MED.2	medium dog-sized to wild boar-sized
005	LG-MD	wild boar-sized to small cattle-sized
006	MD-LG	medium sheep-sized to medium cattle-sized
007	LARGE	domestic cattle/red deer-sized
008	V.LG.	larger than medium cattle-sized
009	S.ART	small artiodactyl
010	M.ART	medium artiodactyl
011	L.ART	large artiodactyl
012	S.BOV	small bovid
013	L.BOV	large bovid
014	O/C/G	*Ovis*/*Capra*/*Gazella* (sheep/goat/gazelle)
015	OV/CP	*Ovis*/*Capra* (sheep/goat)
016	OVIS	*Ovis* sp. (sheep)
017	CAPRA	*Capra* sp. (goat)
018		
019	GAZEL	*Gazella* sp. (gazelle)
020	G.DOR	*Gazella dorcas* (dorcas gazelle)
021	G.GAZ	*Gazella gazella*
022	G.SGT	*Gazella subgutturosa* (goitered gazelle)
023		
024		
025	BOS	*Bos* sp. (cattle)
026	B.TAU	*Bos* taurus (European cattle)
027	B.IND	*Bos indicus* (zebu)
028	BISON	*Bison bonasus* (European bison, wisent)
029	BUBAL	*Bubalus bubalis* (water buffalo)
030	S.CER	small cervid
031	L.CER	large cervid
032	C.CAP	*Capreolus capreolus* (roe deer)
033	CERV.	*Cervus elaphus* (red deer)
034	DAMA	*Dama* sp. (fallow deer)
035	D.DAM	*Dama dama*
036	D.MES	*Dama mesopotamica* (Persian fallow deer)
037	SUS	*Sus scrofa* (boar/pig)
038		
039	CAMEL	*Camelus* sp. (camel)
040	EQUID	small/medium equid
041	LG.EQ	large equid
042	E.A/H	*Equus asinus*/*Equus hemionus*
043	E.ASN	*Equus asinus* (donkey or ass)
044	E.HEM	*Equus hemionus* (wild half-ass)
045	E.CAB	*Equus caballus* (horse)
046		
047		
048		
049		
050	S.CAR	small carnivore
051	M.CAR	medium carnivore
052	L.CAR	large carnivore
053	VIVER	viverrid
054	HERPS	*Herpestes* sp. (mongoose)
055	H.AUR	*Herpestes auropunctatus* (small Indian mongoose)

ANM Animal Identification [continued]

input	output	
056	H.ICH	Herpestes ichneumon (Egyptian mongoose)
057	H.EDW	Herpestes edwardsi (Indian grey mongoose)
058	ICHN.	Ichnuemia albicauda (white-tailed mongoose)
059	GENET	Genetta genetta (European genet)
060	HYAEN	Hyaena hyaena (striped hyaena)
061	S.FEL	small felid
062	M.FEL	medium felid
063	L.FEL	large felid
064	F.CAT	Felis catus (domestic and wild cat)
065	F.CHA	Felis chaus (jungle cat)
066	F.MAR	Felis margarita (sand cat)
067	F.MAN	Felis manul (Pallas' cat)
068	CARA.	Caracal caracal (caracal)
069	LYNX	Lynx lynx (lynx)
070	P.LEO	Panthera leo (lion)
071	P.PAR	Panthera pardus (leopard)
072	P.UNC	Panthera uncia (snow leopard)
073	ACIN.	Acinonyx jubatus (cheetah)
074		
075	S.MUS	small mustelid
076	L.MUS	large mustelid
077	MARTS	Martes foina (stone martin)
078	VORML	Vormela peregusna (marbled polecat)
079	MUSTL	Mustela nivalis (weasel)
080	MELES	Meles meles (badger)
081	MELLV	Mellivora capensis (honey badger)
082	LUTRA	Lutra sp. (otter)
083		
084		
085	S.CAN	small canid
086	M.CAN	medium canid
087	L.CAN	large canid
088	CANIS	Canis sp.
089	C.AUR	Canis aureus (jackal)
090	C.FAM	Canis familiaris (dog)
091	C.LUP	Canis lupus (wolf)
092		
093		
094	FENNC	Fennecus zerda (fennec fox)
095	VULPS	Vulpes sp.
096	V.CAN	Vulpes cana (Blanford's fox)
097	V.RUP	Vulpes rüppelli (sand fox)
098	V.VUL	Vulpes vulpes (red fox)
099		
100	URSUS	Ursus arctos (brown bear)
101		
102		
103	PROCV	Procavia capensis (hyrax)
104		
105	ERIND	erinaceid (hedgehog)
106	ERINA	Erinaceus europaeus (European hedgehog)
107	HEMIE	Hemiechinus sp.
108	PARAE	Paraechinus sp.
109		
110	TALPA	Talpa sp. (mole)
111		
112	SORCD	soricid (shrew)
113	SOREX	Sorex sp.
114	CROCI	Crocidura sp.
115	NEOMY	Neomys sp. (water-shrew)
116	SUNC.	Suncus sp.
117		
118	CHIRO	Chiroptera (bat)
119		
120	RODEN	rodent
121	SCIUR	Sciurus anomalus (brown squirrel)
122	CRICD	cricetid (hamster, gerbil, vole)
123	CRICN	cricetine (hamster)
124	CALOM	Calomyscus bailwardi (mouse-like hamster)
125	CRICE	Cricetulus migratorius (grey hamster)
126	MESOC	Mesocricetus auratus (golden hamster)
127	MICRN	microtine (vole)
128	ARVIC	Arvicola terrestris (water vole)
129	ELLOB	Ellobius fuscocapillus (mole-vole)
130	MICRO	Microtus sp. (vole)
131	GERBN	gerbilline (gerbil/jird)
132	GERBL	Gerbillus sp. (gerbil)
133	MERIO	Meriones sp. (jird)
134	PSAMM	Psammomys obesus (fat sand rat)
135	SEKEE	Sekeetamys calurus (bushy-tailed jird)
136	TATER	Tatera indica (Indian gerbil)
137	MURID	murid (rat/mouse)
138	ACOMY	Acomys sp. (spiny mouse)
139	APODE	Apodemus sp. (field mouse)
140	ARVIC	Arvicanthis niloticus (Nile rat)
141	MUS	Mus musculus (house mouse)
142	NESOK	Nesokia indica (bandicoot rat)
143	RATTU	Rattus sp. (rat)
144	DIPOD	dipodid (jerboa)
145	ALLAC	Allactaga sp.
146	JACUL	Jaculus sp.
147	MUSCD	muscardinid (dormouse)
148	DRYOM	Dryomys nitedula (forest dormouse)
149	GLIS	Glis glis (fat dormouse)
150	ELIOM	Eliomys melanurus (south-west asian garden dormouse)
151	HYSTR	Hystrix indica (Indian crested porcupine)
152	SPALA	Spalax leucodon (lesser molerat)
153		
154		
155	LAGOM	Lagomorpha
156	LEPUS	Lepus capensis (cape hare)
157		
158		
159		
160	OCHOT	Ochotona rufescens (rufescent pika)
.		
.		
.		
199	HOMO	Homo sapiens (human)
.		
.		
.		

DOM Domestication (input column 19) [formats 1 and 2]

input	output	
0	ND	not determinable
1	W	wild
2	?W	probably wild
3	D	domestic
4	?D	probably domestic

CER Certainty (input column 20) [formats 1 and 2]

input	output	
1	1	standard identification
2	2	preliminary identification
3	3	possible identification
4	4	probable identification
5	5	definite identification of potentially questionable item

SYM Symmetry (Right/Left) (input column 21) [formats 1 and 2]

input	output	
-		not applicable
0	?	not determinable
1	R	right
2	L	left
3	M	medial
4	4	right medial/left lateral
5	5	left medial/right lateral
6	B	both left and right

SEX Sex Determination (input column 22) [formats 1 and 2]

input	output	
0	?	not determinable
1	M	male
2	?M	possibly male
3	F	female
4	?F	possibly female
5	C	castrate
6	?C	possibly castrate
7	MC	male or castrate
8	FC	female or castrate

AGE Relative Age (input column 23) [formats 1 and 2]

input	output	
-		not applicable
0	?	not determinable
1	Y	young (not grown up at all)
2	2	foetal or infantile
3	I	infantile
4	4	infantile or juvenile
5	J	juvenile
6	6	juvenile or sub-adult
7	S	sub-adult
8	8	sub-adult or adult
9	A	adult

SIZ Relative Size (within age groups) (input column 24) [formats 1 and 2]

input	output	
-		not applicable
0	?	not determinable
1	M	medium
2	L	large
3	S	small

DIS Disease (input column 25) [formats 1 and 2]

input	output	
-		not applicable
1	1	not defined below, see comment
2	2	typical alteration for that element
3	3	broken without dislocation
4	4	broken with dislocation
5	5	exostosis at articular surface
6	6	exostosis far from articular surfaces
7	7	not inflamed hyperplasia
8	8	holes and grinding in articular surface
9	9	holes far from articular surface

BUR Burning (input column 26) [formats 1 and 2]

input	output	
-		not applicable
0	?	indeterminate
1	1	completely calcined (white)
2	2	partly calcined
3	3	partly calcined, partly carbonized
4	4	carbonized (black)
5	5	partly carbonized
6	6	burnt and partly carbonized
7	7	burnt (reddish)
8	8	partly burnt
9	9	slightly burnt

MOD Modification (input column 27) [formats 1 and 2]

input	output	
-		not applicable
0	??	possibly modified, see comment
1	R1	lightly rodent gnawed
2	R2	heavily rodent gnawed
3	C1	lightly carnivore gnawed
4	C2	heavily carnivore gnawed
5	BL	blow marks present
6	RT	retouched
7	PL	polished
8	PR	pierced
9	TL	tool (shaped and used?)

FRG Origin of Fragmentation (input column 28) [formats 1 and 2]

input	output	
-		not applicable
0	???	not determinable
1	WHL	complete and unbroken
2	PRE	pre-depositional
3	?PR	? pre-depositional
4	PST	post-depositional but pre-modern
5	?PT	? post-depositional
6	MOD	modern
7	?MD	? modern
8	P+R	pre-depositional and minor recent
9	R+P	pre-depositional and major recent

PCS Number of Pieces (input columns 29-30) [formats 1 and 2]

input	output	
--		not applicable (e.g. fused elements)
00	00	
-	-	
99	99	

ELS Number of Elements (input columns 31-32) [formats 1 and 2]

input	output	
--		not applicable (e.g. fragments not identifiable as to element)
00	00	
-	-	
99	99	

WGT Weight (to nearest half gram) (input columns 33-36) [formats 1 and 2]

input	output	
----		not applicable (e.g. fused elements)
0000	000.0	
-	-	
9995	999.5	

COM Comment Follows (input column 37) [formats 1 and 2]

input	output	
0		no comment
1	1	comment
2	2	? modification (MOD, col. 27)
3	3	both '1' and '2'
4	4	small piece of radius or ulna attached to the other
5	5	both '1' and '4'
6	6	
7	7	both '1' and '6'
8	8	
9	9	both '1' and '8'

POST-CRANIAL FORMAT (format 1) ONLY

FSZ Fragment Size (input column 38)

input	output	
-		not applicable
0	??	not determinable
1	EP	epiphysis
2	L1	less than 1/4 estimated length (or size)
3	L2	more than 1/4 but less than 2/4 (1/2) estimated length
4	L3	more than 1/2 but less than 3/4 estimated length
5	L4	more than 3/4 but less than 4/4 (whole) estimated length
6	WH	whole length (size) but still broken
7	UN	unbroken
8	VS	various sizes grouped together
9	MD	modern break, but fragment size greater than 1/2

END Proximal/Distal (input columns 39-40)

input	output	
--		not applicable
00	???	not determinable
01	P-A	proximal articulation
02	P-E	proximal end
03	PES	proximal end and shaft
04	P-S	proximal shaft
05	SHF	shaft
06	D-S	distal shaft
07	DES	distal end and shaft
08	D-E	distal end
09	D-A	distal articulation
10	WHL	complete (whole)

FUS State of Fusion (input columns 41-42)

input	output	
--		[illegible] licable
00	???	[illegible]erminable
01	FUS	[illegible]used
02	LIN	ep[illegible]yseal line
03	UNF	un[illegible]ed
04	F/F	proximal fused/ distal fused
05	F/L	proximal fused/ distal epiphyseal line
06	F/U	proximal fused/ distal unfused
07	L/F	proximal epiphyseal line/ distal fused
08	L/L	proximal epiphyseal line/ distal epiphyseal line
09	L/U	proximal epiphyseal line/ distal unfused
10	U/F	proximal unfused/ distal fused
11	U/L	proximal unfused/ distal epiphyseal line
12	U/U	proximal unfused/ distal unfused

PRF Fracture Type Proximally (input column 43)

input	output	
-		not applicable
0	?	not determinable
1	1	greenstick
2	2	transverse irregular
3	3	oblique irregular
4	4	transverse irregular
5	5	oblique regular
6	6	spiral entire irregular
7	7	spiral end irregular
8	8	spiral end regular
9	9	spiral entire regular

DSF Fracture Type Distally (input column 44)

input	output	
-		not applicable
0	?	not determinable
1	1	greenstick
2	2	transverse irregular
3	3	oblique irregular
4	4	transverse regular
5	5	oblique regular
6	6	spiral entire irregular
7	7	spiral end irregular
8	8	spiral end regular
9	9	spiral entire regular

PPF Position of Primary Fracture (input column 45)

input	output	
-		not applicable
0	?	not determinable
1	1	begins at distal diaphysis
2	2	begins less than 1/4 way up shaft from distal end
3	3	begins less than 1/2 way up shaft but more than 1/4
4	4	begins less than 3/4 way up shaft but more than 1/2
5	5	begins less than whole way up shaft but more than 3/4
6	6	begins at proximal diaphysis
7		no primary breaks (= n.a.)
8	S	sliver (less than 3/5ths of circumference present)

SHF Position of Fracture: Shaft or Dorsal/Ventral (input columns 46-47)

input	output	
--		not applicable
00	??	not determinable
01	M-	begins on medial half
02	L-	begins on lateral half
03	A-	begins on anterior half
04	P-	begins on posterior half
05	MA	begins on medial/anterior quarter
06	MP	begins on medial/posterior quarter
07	LA	begins on lateral/anterior quarter
08	LP	begins on lateral/posterior quarter
09	AP	begins on anterior and posterior halves
10	ML	begins on medial and lateral halves
11	TV	transverse fracture (often not used)
		[axial skeleton and pelvis]
20	??	not determinable (= '00')
21	D	dorsal portion present
22	C	central portion present
23	V	ventral portion present
24	WH	complete dorsoventrally

PAP Position of Fracture Proximally (anterior/posterior) (input column 48)

input	output	
-		not applicable
0	?	not determinable
1	A	anterior portion present
2	C	central portion present
3	P	posterior portion present
4	W	complete anterior-posterior

PML Postion of Fracture Proximally (medial/lateral) (input column 49)

input	output	
-		not applicable
0	?	not determinable
1	M	medial portion present
2	C	central portion present
3	L	lateral portion present
4	W	complete medial-lateral

DAP Position of Fracture Distally (anterior/posterior) (input column 50)

same as for proximal end (PAP)

DML Position of Fracture Distally (medial/lateral) (input column 51)

same as for proximal end (PML)

CAP Cuts on Shaft (or dorsally) anterior/ posterior (input column 52)

input	output	
-		not applicable
0	?	not determinable
1	A	anterior
2	P	posterior
3	B	both anterior and posterior

CML Cuts on Shaft (or dorsally) medial/ lateral (input column 53)

input	output	
-		not applicable
0	?	not determinable
1	M	medial
2	L	lateral
3	B	both medial and lateral

CPA Cuts on Proximal End (or centrally) anterior/ posterior (input column 54)

input	output	
-		not applicable
0	?	not determinable
1	A1	anterior at proximal end of shaft
2	P1	posterior at proximal end of shaft
3	B1	both anterior and posterior at proximal end of shaft
4	A2	anterior on proximal articular surface
5	P2	posterior on proximal articular surface
6	B2	both anterior and posterior on proximal articular surface
7	A3	anterior on both shaft and articular surface
8	P3	posterior on both shaft and articular surface
9	B3	anterior and posterior on both shaft and articular surface

CPM Cuts on Proximal End (or centrally) medial/ lateral (input column 55)

input	output	
-		not applicable
0	?	not determinable
1	M1	medial at proximal end of shaft
2	L1	lateral at proximal end of shaft
3	B1	both medial and lateral at proximal end of shaft
4	M2	medial on proximal articular surfece
5	L2	lateral on proximal articular surface
6	B2	both medial and lateral on proximal articular surface
7	M3	medial on both shaft and proximal articular surface
8	L3	lateral on both shaft and proximal articular surface
9	B3	medial and lateral on both shaft and articular surface

CDA Cuts on Distal End (or ventrally) anterior/ posterior (input column 56)

same as for proximal end (or centrally) [CPA]

CDM Cuts on Distal End (or ventrally) medial/ lateral (input column 57)

same as for proximal end (or centrally) [CPM]

LOOSE TEETH (format 1)

TTY Tooth Type (input column 58)

input	output	
-		not applicable
0	??	not determinable
1	UD	upper deciduous (milk)
2	UA	upper adult (permanent)
3	LD	lower deciduous (milk)
4	LA	lower adult (permanent)
5	U?	upper tooth
6	L?	lower tooth
7	?D	deciduous (milk) tooth
8	?A	adult (permanent) tooth

TCL Tooth Class (input column 59)

input	output	
-		not applicable
0	?	not determinable
1	I	incisor
2	C	canine
3	P	pre-molar
4	M	molar
5	C	cheek tooth (P or M)

TNO Tooth Number (input column 60)

input	output	
-		not applicable
0	?	not determinable
1	1	first
2	2	second
3	3	third
4	4	fourth
5	5	first or second
6	6	second or third
7	7	third or fourth
8	8	first, second, or third
9	9	second, third, or fourth

TRT Tooth Root (input column 61)

input	output	
-		not applicable
0	?	not determinable
1	1	open
2	2	separate but not closed
3	3	closed
4	4	swollen

TWR Tooth Wear (input column 62)

[see CRANIAL FORMAT (format 2) for tooth wear categories]

input	output	
--		not applicable
00	??	not determinable
-		
-		
28		
91		
-		
-		
99		

CRANIAL FORMAT (format 2) ONLY

RHC Horncore [Antler] - right side or side not determinable (input column 38)

input	output	horncore	[antler]
-		not applicable	
0	?	not determinable	
1	1	base	[base to beginning of first tine]
2	2	corpus	[first tine]
3	3	tip	[base + first tine]
4	4	base + corpus	[fragment of column]
5	5	corpus + tip	[column with tines]
6	6	some of base missing	[crown]
7	7	some of corpus missing	[single tine or fragments]
8	8	some of tip missing	[base, first tine, and column with tines]
9	9	complete	[complete or nearly complete brace of antlers]

LHC Horncore [Antler] - left side (input column 39)

same as for right side [RHC]

FRN Frontal (input column 40)

input	output	
-		not applicable
0	?	side indeterminate
1	1	2/3 or more of right side present
2	2	2/3 or more of left side present
3	3	2/3 or more of both sides present
4	4	less than 2/3 of right side present
5	5	less than 2/3 of left side present
6	6	less than 2/3 of right side present, 2/3 or more of left side present
7	7	less than 2/3 of left side present, 2/3 or more of right side present
8	8	less than 2/3 of both right and left sides present
9	9	[for MAX and PMX, teeth only; for BAS, foramen magnum area]

The input and output of the following are the same as for frontal (FRN)

PAR Parietal (input column 41)
INP Interparietal (42)
OCC Occipital (43)
BAS Basioccipital (44)
SPH Sphenoid (45)
PTR Pterygoid (46)
PET Petrous (47)
TEM Temporal (48)
VOM Vomer (49)
PAL Palatine (50)
ZYG Zygomatic (51)
LAC Lacrimal (52)
NAS Nasal (53)
MAX Maxillary (54)
PMX Premaxillary (55)

AMN Mandible - anterior (input column 56)

input	output	
-		not applicable
0	?	fragment (or portion not determinable)
1	1	incisor area
2	2	diastema area
3	3	alveolus area
4	4	horizontal ramus area (including base)
5	5	incisor + diastema areas
6	6	incisor + diastema + alveolus
7	7	all anterior areas represented
8	8	diastema + alveolus + horizontal ramus area
9	9	alveolus + horizontal ramus

PMN Mandible - posterior (input column 57)

input	output	
-		not applicable
0	?	fragment (or portion not determinable)
1	1	heel area
2	2	ascending ramus area
3	3	area of articular process
4	4	coronoid process
5	5	heel + ascending ramus area
6	6	heel + ascending ramus + articular process areas
7	7	all posterior areas represented
8	8	ascending ramus + articular process + coronoid process
9	9	ascending ramus + articular or coronoid process areas

CUT Cuts (input columns 58-59)

input	output	
--		not applicable
		cuts on mandible
01	M1	- incisor area
02	M2	- diastema area
03	M3	- alveolus area
04	M4	- horizontal ramus area
05	M5	- heel area
06	M6	- ascending ramus area
07	M7	- articular process
08	M8	- coronoid process area
09	BC	across occipital condyles
38	RH	horn core - right side
39	LH	horn core - left side
40	FR	frontal
41	PA	parietal
42	IN	interparietal
43	OC	occipital
44	BA	basioccipital
45	SP	sphenoid
46	PT	pterygoid
47	PE	petrous
48	TE	temporal
49	VO	vomer
50	PA	palatine
51	ZY	zygomatic
52	LA	lacrimal
53	NA	nasal
54	MX	maxillary
55	PM	premaxillary

TOOTH WEAR

WI1 1st Incisor (input column 60)

input	output	
-		not present/not applicable
0	?	presence of tooth not determinable (that portion of jaw missing)
1	1	diciduous tooth lightly worn
2	2	deciduous tooth more than only lightly worn
3	3	permanent tooth bud present/ milk tooth heavily worn or missing
4	P	permanent tooth present but wear not determinable
5	U	permanent tooth unworn/ erupting
6	S	permanent tooth slightly worn
7	M	permanent tooth moderately worn
8	H	permanent tooth heavily worn
9	V	permanent tooth very heavily worn

The input and output of the following are the same as for 1st Incisor (WI1)

WI2 2nd Incisor (input column 61)
WI3 3rd Incisor (62)
WCN Canine (='4th incisor') (63)
WP1 1st Premolar (64)
WP2 2nd Premolar (65)

WP3 3rd Premolar (input columns 66-67)

[SEE FIGURE 1 FOR OVIS/CAPRA WEAR PATTERNS]

input	output	
--		not applicable
00	??	presence of tooth not determinable (that portion of jaw missing)
01	D?	D3 wear not determinable
02	DU	D3 unworn
03	D1	D3 slightly worn 1
04	D2	D3 slightly worn 2
05	D3	D3 slightly worn 3
06	D4	D3 moderately worn 1
07	D5	D3 moderately worn 2
08	D6	D3 moderately worn 3
09	D7	D3 heavily worn 1
10	D8	D3 heavily worn 2
11	D9	D3 heavily worn 3
12	DV	D3 very heavily worn 1
13	DX	D3 very heavily worn 2
14	CM	comment on P/D 3
15	P?	P3 wear not determinable
16	U1	P3 visible in jaw
17	U2	P3 erupting
18	U3	P3 half-erupted
19	U4	P3 erupted but unworn
20	U5	P3 coming into wear
21	S+	P3 slight wear
22	M+	P3 moderate wear
23	H+	P3 heavy wear
24	V+	P3 very heavy wear
90	D?	D3 wear not determinable
91	DS	D3 lightly worn
92	DW	D3 more than only lightly worn
93	U1	P3 visible in jaw
94	P?	P3 wear not determinable
95	U2	P3 erupting
96	S+	P3 slight wear
97	M+	P3 moderate wear
98	H+	P3 heavy wear
99	V+	P3 very heavy wear

WP4 4th Premolar (input columns 68-69)

[SEE FIGURE 1 FOR OVIS/CAPRA WEAR PATTERNS]

input	output	
--		not applicable
00	??	presence of tooth not determinable (that portion of jaw missing)
14	CM	comment on P4
15	P?	P4 wear not determinable
16	U1	P4 visible in jaw
17	U2	P4 erupting
18	U3	P4 half-erupted
19	U4	P4 erupted but unworn
20	U5	P4 coming into wear
21	S1	P4 slightly worn 1
22	S2	P4 slightly worn 2
23	S3	P4 slightly worn 3
24	S4	P4 slightly worn 4
25	M1	P4 moderately worn 1
26	M2	P4 moderately worn 2
27	H+	P4 heavily worn
28	V+	P4 very heavily worn
90	D?	D4 wear not determinable
91	DS	D4 lightly worn
92	DW	D4 more than only lightly worn
93	U1	P4 visible in jaw
94	P?	P4 wear not determinable
95	U2	P4 erupting
96	S+	P4 slight wear
97	M+	P4 moderate wear
98	H+	P4 heavy wear
99	V+	P4 very heavy wear

WM1 1st Molar (input columns 70-71)

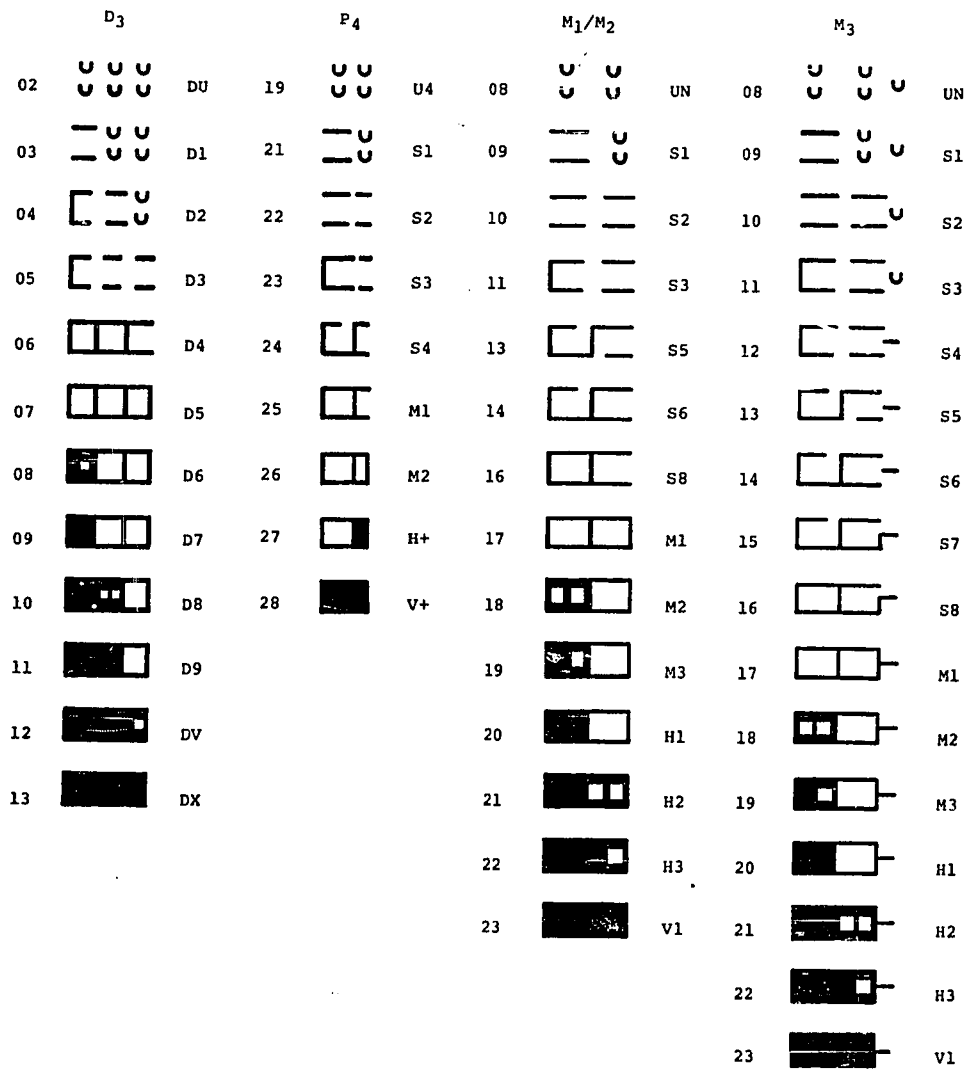
[SEE FIGURE 1 FOR OVIS/CAPRA WEAR PATTERNS]

input	output	
--		not applicable
00	??	presence of tooth not determinable (that portion of jaw missing)
01	P?	wear not determinable
02	U0	perforation in crypt
03	U1	tooth visible in crypt
04	U2	tooth erupting
05	U3	tooth half erupted
06	U4	tooth erupted but not worn
07	U5	tooth coming into wear
08	UN	(loose) tooth unworn
09	S1	tooth slightly worn 1
10	S2	tooth slightly worn 2
11	S3	tooth slightly worn 3
12	S4	tooth slightly worn 4
13	S5	tooth slightly worn 5
14	S6	tooth slightly worn 6
15	S7	tooth slightly worn 7
16	S8	tooth slightly worn 8
17	M1	tooth moderately worn 1
18	M2	tooth moderately worn 2
19	M3	tooth moderately worn 3
20	H1	tooth heavily worn 1
21	H2	tooth heavily worn 2
22	H3	tooth heavily worn 3
23	V1	tooth very heavily worn 1
24	V2	tooth very heavily worn 2
90		not applicable for molars
91		not applicable for molars
92		not applicable for molars
93	U1	tooth visible in crypt
94	P?	wear not determinable
95	U2	tooth erupting
96	S+	slight wear
97	M+	moderate wear
98	H+	heavy wear
99	V+	very heavy wear

The input and output of the following are the same as for 1st Molar (WM1)

WM2 2nd Molar (input columns 72-73)
WM3 3rd Molar (input columns 74-75)

FIGURE 1. *Input and output codes for mandibular tooth wear of sheep and goats (based on Payne 1973).*



CONTEXT FORMAT

[See Table 1 for data field definitions for columns 1 through 21. Excavator's square, test trench, stratum, and feature designations are entered in this area along with year of excavation, format code (4), and the site and locus identification numbers which are used for cross-referencing.]

FFF Floor/Fill/Feature (input columns 22-23)

input	output	
--		not applicable
00	??	not determinable
01	LEVELING	leveling/intentional fill between walls
02	PLATFORM	platform
03	WALLS	walls
04	FOUNDATION	foundation trench fill
05		
06	MIDDEN	midden
07		
08		
09	MOUSE-HOLE	mouse hole
10	HEARTH	hearth
11	GRAVE	grave
12	DEPRESSION	depression
13	DRAIN	drain
14	CONTAINER	container
15	SHAPED PIT	shaped pit
16	UNSHAP.PIT	unshaped pit
17	WELL	well
18		
19		
20	MIXED FILL	fill below and above floor/ surface (mixed)
21	FLR.LEVEL	approximately floor/surface level
22	ON FLOOR	on floor/surface
23	IN FLOORS	within series of floors/ surfaces
24	ABOVE FLR.	immediately above floor/ surface (within c. 10 cm.)
25	FLR.+ABOVE	floor/surface to floor above (may include 24 + 26)
26	ROOM FILL	fill well above floor/ surface but below wall tops
27	UNDIF.FILL	fill above wall tops or undifferentiated fill
28		
29		
30	SURFACE	surface deposits

INX Interior/Exterior (input column 24)

input	output	
-		not applicable
0	??	not determinable
1	IN	inside walls
2	?IN	? inside walls
3	?OUT	? outside walls
4	OUT	outside walls
5	ASSC	associated with wall(s)
6	NONE	no significant structural remains in area

ICX Interior Context Description (input column 25)

input	output	
-		not applicable
0	??	not determinable
1	RM1	room with door
2	RM2	room with hearth
3	RM3	room without evident doorway
4	BATH	bathroom
5	SPEC	other special purpose room (note in comment)
6	OUTB	outbuilding (isolated small structure)
7		
8		
9	TOMB	tomb

ECX Exterior Context Description (input column 26)

inpu	output	
-		not applicable
0		not determinable
1	C[illegible]	undifferentiated open space far from buildings
2	OP-N	undifferentiated open space near buildings
3	ALLY	alley
4	STRT	street
5	CORT	court
6		
7		
8		
9		

FIL Fill Description (major ingredient) (input columns 27-28)

input	output	
--		not applicable
00	??	not determinable
01	HARD	hard or compact
02	GEL	gel (wall melt)
03	BRICK	bricky or brick debris
04	SD/BRK	sandy with brick/gel
05	SD/B/A	sandy with brick/gel and ash
06	SANDY	sandy
07	SAND/A	sandy with ash
08	ASHY	ash or ashy
09	SOFT	soft
10	SFT/BK	soft or ashy with brick/gel
11	ORGANC	organic stained, mottled, etc.
12	RUBBLE	rubble (stones with other debris)
13	WATER	water lain
14	LAMIN.	laminated
15	BURNED	burned

QAL Quality of Context (subjective assessment) (input column 29)

input	output	
0	?	not determinable
1	E	excellent: discrete, well-defined, single stratum/feature
2	G	good: well-defined but includes more than on stratum
3	F	fair: not well-defined but is sealed
4	P	poor: unsealed (includes unsealed pits)
5	S	surface material

RCV Recovery Type (input column 30)

input	output	
0	?	not determinable
1	WET	wet sieved
2	DRY	dry screened
3	FPK	fine picked
4	PK	picked
5	RPK	rough picked
6	OTH	combination, see comment

SAM Same Context as ... (input columns 31-34)

input	output	
----	----	not applicable
####	####	site and locus number/designation. Sometimes multiple lot numbers are used for material from the same context. If so, for one lot place its own number here and use that same number for the other relevant lots.

CTM Contemporary Context (input columns 35-38)

input	output	
----	----	not applicable
####	####	site and locus number/designation. Different context but one which has been determined through study of notes, sections, etc. to be more or less precisely contemporary.

EAR Earlier Context (input columns 39-42)

input	output	
----	----	not applicable
####	####	site and locus number/designation. The immediately earlier context with bones, in the same phase.

LAT Later Context (input columns 43-46)

input	output	
----	----	not applicable
####	####	site and locus number/designation. The immediately later context with bones, in the same phase.

PR1 Period of Occupation 1 (input columns 47-48)

input	output	
--		not determinable (see comment)
01	1	
.		
.		
30	30	
31	A	
.		
.		
56	Z	

The same codes are used for the following:

PH1 Phase of Occupation 1 (input columns 49-50)
SB1 Subphase of Occupation 1 (input columns 51-52)
PR2 Period of Occupation 2 (input columns 53-54)
PH2 Phase of Occupation 2 (input columns 55-56)
SB2 Subphase of Occupation 2 (input columns 57-58)

SCH Site Characterization (input column 59)

input	output	
0	ND	not determinable
1	CAVE	cave or rock shelter
2	CAMP	open air camp
3	STRC	isolated structure
4	DOMS	settlement: domestic area
5	CRFT	settlement: craft area
6	MONU	settlement: area of monumental architecture
7	CIRC	settlement: area of circumvallation
8	SETL	settlement: other
9	GRAV	graveyard

THO Thousand years (input columns 60-61)

input	output	
00	??	not determinable (see comment)
01	1	one thousand
.	.	etc.

HUN Hundred years (input column 62)

input	output	
0	000	even thousand(s)
.	.	
9	900	nine hundred

BAC B.C./A.C. (input column 63)

input	output	
1	BC	B.C. (Before Christ)
2	AC	A.C. (After Christ)

CMN Comment Follows (input column 64)

input	output	
0	0	no comment
1	1	comment follows
2	2	comment recorded elsewhere
3	3	both 1 and 2

APPENDIX 2

BONE MEASUREMENTS

Dimension Definitions for Measurements
Following von den Driesch (1976), Uerpmann (1978), and Stampfli (1963)

Cd Element	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
31 Atlas	GL	GLF	GB	BFcd	BFcr	BCcd	HCcd	HAvn	H	(C = channel; A = arch)		
31 Axis	LCDe	LC	BFcr	BDe	H	BCcr	LAPa	BPacd	BPtr	SBV	BFcd	—
31 Scapula	SLC	GLP	LG	BG	HC	HS	DHA	Ld	—	—	—	—
31 Humerus	Bd	BT	SD	Bp	Dp	GLC	GL	GLex	GL1	Dd	—	—
31 Radius	Bp	BFp	SD	Bd	BFd	GL	GLex1	GLex2	L1	FL	CD	—
31 Ulna	BPC	DPA	SDO	GL	GLex	LO	GLr+u	GL1r+u	—	—	—	—
31 Mc. + Mp.	Bp	Dp	SD	Bd	Dd	GL	GLex	CD	GL1	L1	DD	—
31 Pelvis	LA/R	BA	L1	GL	LS	SH	SB	LFo	GBTc	GBA	GBTi	SBI
31 Femur	Bp	DC	SD	Bd	BTp	GLC	GL	GLex	CD	BTr	—	—
31 Tibia	Bp	SD	Bd	Dd*	GL	GLex1	GLex2	L1	Dp	CD	Dd(eq)	—
31 Astrag.	GL1	GLm	Dl	Dm	Bd	Bp	GH	LmT	GB	BFd	—	—
31 Calcan.	GL	Bl	DTu	GLex	GB	—	—	—	—	—	—	—
31 Os Cen.	GB	—	—	—	—	—	—	—	—	—	—	—
31 Mt.	Bp(S)	Bp(D)	Dp	SD	Bd	Dd	LeP	GL	CD	L1	GLex	DD
31 Ph. 1	GLpe	Bp	Bd	SD	GL(eq)	BFp	Dp	BFd	PL	—	—	—
31 Ph. 2	GL	Bp	Bd	SD	GL(eq)	BFp	Dp	BFD	—	—	—	—
33 Skull	U07-1	U07-2	U07-3	U07-4	U07-5	U07-6	U07-7	U07-8	—	—	—	—
35 Mandib.	U11-1	U11-2	U11-3	U11-4	U11-6	U11-7	U11-8	U12-1	NOTE	U12-3	U12-8	D21-3
36 Teeth	L(M1)	B(M1)	H(M1)	L(M2)	B(M2)	H(M2)	L(M3)	B(M3)	H(M3)		—	—
38 Mand.	D21-12	21-13	21-14	—	—	—	—	—	—	—	—	—

NOTES: Cd = code under "F M" in Table of measurements. All designations as in von den Driesch (1976) unless otherwise noted. * = Dd for tibia in bovids is measured with calliper blade flat against plantar side. Mandible: M9—length from articular process to aboral indentation of mental foramen. Teeth: H = height of enamel, lingual side mandibular, buccal side maxillary, measured in middle of tooth (i.e., least height); H(M3) = Height of third molar. Skull measurements marked 'U' designate numbers in Uerpmann (1978), marked 'D' designate figure—measurement number in von den Driesch (1976). Metatarsal measurement M1 is the true breadth of Stampfli (1963:154). GLex: greatest length without either one (1) or two (2) epiphyses.

KEY / IDENTIFICATION / CHARAC. / MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

KEY LOC	BON	F	M	ANM	ELM	DOM	C	S	SX	A	B	C M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
0731	0009	3	3	O/C	MAX/T	ND	1	L	?	A		--	--	22.9	--	--	--	--	--	--	--	--	--	
2121	0002	3	1	O/C	ULNA	ND	1	R	?	J		--	21.9	18.8	--	--	--	--	--	--	--	--	--	
0712	0001	3	6	O/C	TTHUP	ND	1	L	?	4		15.9	8.9	--	--	--	--	--	--	--	--	--	--	
0206	0044	3	6	O/C	TTHUP	ND	1	R	?	I		14.5	8.8	E 27.0	--	--	--	--	--	--	--	--	--	
0192	0010	3	6	O/C	TTHUP	ND	1	R	?	I		15.2	7.7	--	--	--	--	--	--	--	--	--	--	
0776	0005	3	6	O/C	TTHLW	ND	1	R	?	4		--	--	--	15.7	6.2	30.5	--	--	--	--	--	--	
0215	0042	3	6	O/C	TTHLW	ND	1	R	?	4		--	--	--	14.6	6.2	27.3	--	--	--	--	--	--	
2115	0009	3	6	O/C	TTHLW	ND	1	L	?	J		--	--	--	15.0	6.3	29.5	--	--	--	--	--	--	
0399	0007	3	6	OV/CP	MAX/T	ND	1	L	?	J		15.1	10.6	23.0	17.6	10.9	32.5	--	--	--	--	--	--	
3724	0102	3	6	OV/CP	MAX/T	ND	1	L	?	A		--	--	--	14.0	E 10.8	9.5	18.2	10.8	11.2	--	--	--	
3765	0127	3	6	OV/CP	MAX/T	ND	1	R	?	I		E 16.5	8.3	--	--	--	--	--	--	--	--	--	--	
3765	0114	3	6	OV/CP	MAX/T	ND	1	L	?	S		14.2	10.7	16.7	106.7	11.6	28.6	17.3	10.0	35.5	--	--	--	
3759	0002	3	3	OV/CP	MAX/T	ND	1	L	?	6		E 65.5	E 43.0	24.3	--	--	--	--	--	--	--	--	--	
3759	0002	3	6	OV/CP	MAX/T	ND	1	L	?	6		12.8	9.8	E 18.5	15.9	10.0	30.0	16.8	8.9	E 36.5	--	--	--	
3761	0043	3	6	OV/CP	MAX/T	ND	1	L	?	I		17.0	9.0	--	--	--	--	--	--	--	--	--	--	
3752	0013	3	6	OV/CP	MAX/T	ND	1	L	?	A		--	--	--	--	--	--	19.0	12.0	18.0	--	--	--	
3750	0003	3	3	OV/CP	MAX/T	ND	1	R	?	J		--	--	25.5	--	--	--	--	--	--	--	--	--	
3750	0003	3	6	OV/CP	MAX/T	ND	1	R	?	J		--	--	--	18.5	11.4	34.4	--	--	--	--	--	--	
3732	0031	3	6	OV/CP	MAX/T	ND	1	R	?	S		13.8	10.9	16.0	--	--	--	--	--	--	--	--	--	
3728	0004	3	3	OV/CP	MAX/T	ND	1	R	?	A		--	--	E 21.0	--	--	--	--	--	--	--	--	--	
3728	0004	3	6	OV/CP	MAX/T	ND	1	R	?	A		11.0	11.1	8.5	13.0	11.4	14.0	--	--	--	--	--	--	
3719	0001	3	3	OV/CP	MAX/T	ND	1	L	?	J		--	E 44.5	--	--	--	--	--	--	--	--	--	--	
3719	0001	3	6	OV/CP	MAX/T	ND	1	L	?	J		13.7	11.3	19.4	16.2	11.5	E 25.0	--	--	--	--	--	--	
3721	0009	3	6	OV/CP	MAX/T	ND	1	L	?	A		--	--	--	16.3	11.7	24.5	--	--	--	--	--	--	
0286	0008	3	6	OV/CP	MAX/T	ND	1	L	?	8		--	--	--	13.9	11.9	20.8	--	--	--	--	--	--	
1901	0027	3	1	OV/CP	MAX/T	ND	1	R	?	A		--	--	--	15.7	--	17.4	17.9	11.5	24.0	--	--	--	
1317	0001	3	6	OV/CP	MAX/T	ND	1	L	?	J		14.9	10.5	--	--	--	--	--	--	--	--	--	--	
0322	0003	3	6	OV/CP	MAX/T	ND	1	R	?	J		16.4	10.9	26.0	19.5	11.2	38.0	--	--	--	--	--	--	
0782	0006	3	6	OV/CP	MAX/T	ND	1	R	?	8		12.7	11.6	12.8	17.2	11.9	23.0	19.6	11.9	33.5	--	--	--	
0810	0001	3	6	OV/CP	MAX/T	ND	1	L	?	J		17.4	11.7	23.0	20.4	12.1	38.0	--	--	--	--	--	--	
0727	0019	3	6	OV/CP	MAX/T	ND	1	L	?	J		15.7	10.2	28.5	19.6	10.0	37.5	--	--	--	--	--	--	
0727	0020	3	6	OV/CP	MAX/T	ND	1	R	?	A		--	--	--	15.2	12.4	13.0	19.1	11.5	17.5	--	--	--	
1923	0054	3	6	OV/CP	MAX/T	ND	1	L	?	S		13.6	11.6	17.5	16.8	12.4	30.5	17.8	11.5	35.5	--	--	--	
0717	0004	3	6	OV/CP	MAX/T	ND	1	L	?	J		15.1	10.7	27.0	18.0	11.1	36.0	--	--	--	--	--	--	
1925	0027	3	6	OV/CP	MAX/T	ND	1	L	?	S		--	--	--	15.7	11.1	25.5	17.3	10.5	30.5	--	--	--	
0821	0007	3	6	OV/CP	MAX/T	ND	1	L	?	J		15.2	11.1	23.0	--	--	--	--	--	--	--	--	--	
0171	0033	3	3	OV/CP	MAX/T	ND	1	R	?	A		--	41.0	--	--	--	--	--	--	--	--	--	--	
0171	0035	3	6	OV/CP	MAX/T	ND	1	R	?	A		P 10.0	--	--	12.3	12.7	10.5	19.9	12.6	E 17.0	--	--	--	
0159	0237	3	6	OV/CP	MAX/T	ND	1	R	?	8		13.2	10.8	16.8	15.0	11.0	27.6	--	--	--	--	--	--	
0159	0238	3	6	OV/CP	MAX/T	ND	1	R	?	S		14.9	E 10.0	21.0	16.2	E 9.3	28.9	--	--	--	--	--	--	
0159	0235	3	6	OV/CP	MAX/T	ND	1	R	?	A		12.7	12.0	12.5	14.0	13.3	16.9	18.4	E 11.0	23.7	--	--	--	
0159	0195	3	3	OV/CP	MAX/T	ND	1	R	?	A		--	--	25.0	--	--	--	--	--	--	--	--	--	
0159	0195	3	6	OV/CP	MAX/T	ND	1	R	?	A		12.8	10.2	14.0	14.7	10.9	23.5	--	--	--	--	--	--	
0159	0173	3	3	OV/CP	MAX/T	ND	1	L	?	A		--	44.9	--	--	--	--	--	--	--	--	--	--	
0159	0173	3	6	OV/CP	MAX/T	ND	1	L	?	A		13.3	12.1	12.0	14.2	13.0	20.0	18.6	13.3	26.0	--	--	--	
0159	0187	3	6	OV/CP	MAX/T	ND	1	R	?	J		14.5	10.4	21.9	17.3	10.6	E 33.0	--	--	--	--	--	--	
1933	0038	3	6	OV/CP	MAX/T	ND	1	L	?	6		16.9	11.1	27.0	19.0	12.0	37.5	--	--	--	--	--	--	
0822	0012	3	6	OV/CP	MAX/T	ND	1	R	?	6		14.8	11.2	20.5	17.6	11.8	34.5	16.8	10.5	38.5	--	--	--	
0172	0008	3	6	OV/CP	MAX/T	ND	1	L	?	J		16.0	10.7	26.0	18.3	10.2	--	--	--	--	--	--	--	
0170	0001	3	3	OV/CP	MAX/T	ND	1	L	?	A		60.0	39.5	23.0	--	--	--	--	--	--	--	--	--	
0170	0001	3	6	OV/CP	MAX/T	ND	1	L	?	A		8.9	10.2	E 7.5	12.1	11.8	7.8	17.8	E 12.0	E 12.0	--	--	--	
0164	0003	3	6	OV/CP	MAX/T	ND	1	R	?	A		12.5	11.7	11.8	15.1	12.4	18.9	18.5	12.1	27.1	--	--	--	
1940	0016	3	6	OV/CP	MAX/T	ND	1	L	?	8		13.8	11.3	17.5	--	--	--	--	--	--	--	--	--	
0206	0040	3	3	OV/CP	MAX/T	ND	1	R	?	S		--	E 47.5	--	--	--	--	--	--	--	--	--	--	
0206	0040	3	6	OV/CP	MAX/T	ND	1	R	?	S		14.4	11.1	20.0	17.0	11.9	34.0	18.0	10.7	E 36.0	--	--	--	
0197	0032	3	6	OV/CP	MAX/T	ND	1	L	?	8		--	--	--	16.7	11.4	25.2	--	--	--	--	--	--	
0765	0016	3	6	OV/CP	MAX/T	ND	1	R	?	J		14.7	9.9	E 22.5	E 16.7	E 8.9	E 31.0	--	--	--	--	--	--	
0214	0015	3	6	OV/CP	MAX/T	ND	1	R	?	S		12.3	10.5	17.0	14.6	11.1	27.5	17.2	10.7	33.0	--	--	--	
0198	0005	3	6	OV/CP	MAX/T	ND	1	L	?	A		--	--	--	15.2	--	--	18.8	E 12.2	21.5	--	--	--	
0186	0003	3	6	OV/CP	MAX/T	ND	1	B	?	I		15.8	9.0	--	--	--	--	--	--	--	--	--	--	
2108	0065	3	6	OV/CP	MAX/T	ND	1	L	?	A		--	--	--	12.8	12.2	4.5	--	--	9.2	--	--	--	
2305	0034	3	6	OV/CP	MAX/T	ND	1	R	?	J		15.7	10.3	25.5	19.4	10.0	E 32.5	--	--	--	--	--	--	
1941	0056	3	6	OV/CP	MAX/T	ND	1	L	?	A		10.1	10.0	E 8.0	12.8	12.7	9.0	20.5	E 13.0	10.5	--	--	--	
0876	0004	3	6	OV/CP	MAX/T	ND	1	R	?	J		--	--	--	15.0	10.2	29.5	--	--	--	--	--	--	
2125	0010	3	6	OV/CP	MAX/T	ND	1	L	?	S		--	--	--	16.7	10.9	30.0	18.8	10.3	--	--	--	--	
2126	0002	3	6	OV/CP	MAX/T	ND	1	L	?	A		--	--	--	13.1	11.9	13.2	17.3	10.9	21.5	--	--	--	
2126	0004	3	6	OV/CP	MAX/T	ND	1	L	?	4		15.0	10.0	26.3	--	--	--	--	--	--	--	--	--	
0180	0004	3	6	OV/CP	MAX/T	ND	1	L	?	S		--	--	--	16.9	12.3	25.0	18.4	11.7	32.5	--	--	--	
0304	0003	3	5	OV/CP	MAN/T	ND	1	R	?	S		--	--	22.8	--	--	19.8	--	--	--	--	--	--	
0517	0004	3	6	OV/CP	MAN/T	ND	1	L	?	J		14.1	7.9	16.0	18.0	8.6	28.5	--	--	--	--	--	--	
0517	0016	3	6	OV/CP	MAN/T	ND	1	L	?	8		--	--	--	--	--	--	23.5	8.8	28.8	E 5.6	--	--	
3715	0011	3	5	OV/CP	MAN/T	ND	1	R	?	A		72.0	50.0	22.0	--	--	--	--	--	--	--	--	--	
3715	0011	3	6	OV/CP	MAN/T	ND	1	R	?	A		--	--	--	14.3	8.3	12.5	24.2	8.4	23.5	5.9	--	--	
3706	0019	3	5	OV/CP	MAN/T	ND	1	L	?	I		--	--	27.6	--	--	--	--	--	--	--	--	--	
3706	0019	3	6	OV/CP	MAN/T	ND	1	L	?	I		16.0	6.7	25.0	--	--	--	--	--	--	--	--	--	
0539	0001	3	5	OV/CP	MAN/T	ND	1	R	?	J		--	--	31.3	--	--	--	--	--	--	--	--	--	
0539	0001	3	6	OV/CP	MAN/T	ND	1	R	?	J		15.8	7.2	24.8	--	--	--	--	--	--	--	--	--	
0399	0006	3	5	OV/CP	MAN/T	ND	1	R	?	J		--	--	27.3	--	--	--	--	--	--	--	--	--	
0399	0008	3	6	OV/CP	MAN/T	ND	1	R	?	J		13.9	E 7.9	17.9	18.3	8.0	30.4	--	--	--	--	--	--	
0355	0012	3	5	OV/CP	MAN/T	ND	1	R	?	I		--	--	33.3	--	--	--	--	--	--	--	--	--	
0399	0004	3	5	OV/CP	MAN/T	ND	1	R	?	S		72.0	23.0	48.5	--	--	--	37.3	--	--	--	--	--	
0399	0004	3	6	OV/CP	MAN/T	ND	1	R	?	S		12.3	7.4	13.0	15.3	7.5	25.5	20.8	5.9	35.0	5.0	--	--	
0302	0006	3	5	OV/CP	MAN/T	ND	1	R	?	J		E 78.0	53.2	E 24.0	--	--	22.1	E 36.7	--	--	--	--	--	
0302	0006	3	6	OV/CP	MAN/T	ND	1	R	?	J		13.0	7.1	22.5	16.3	8.1	30.0	23.5	7.7	36.8	5.3	--	--	
0293	0003	3	6	OV/CP	MAN/T	ND	1	R	?	8		--	--	--	12.9	7.4	13.0	E 19.0	7.7	18.5	4.0	--	--	
0279	0002	3	6	OV/CP	MAN/T	ND	1	L	?	A		9.6	6.4	5.5	--	--	--	24.5	8.3	13.0	5.9	--	--	
3767	0038	3	6	OV/CP	MAN/T	ND	1	R	?	J		15.0	6.6	E 25.0	--	--	--	--	--	--	--	--	--	
3733	0004	3	5	OV/CP	MAN/T	ND	1	R	?	J		--	--	27.3	--	--	--	--	--	--	--	--	--	
3724	0099	3	6	OV/CP	MAN/T	ND	1	L	?	A		11.1	7.0	6.0	14.7	8.1	15.7	23.6	8.6	29.5	6.0	--	--	
3724	0099	3	5	OV/CP	MAN/T	ND	1	L	?	A		73.3	50.8	22.5	--	--	--	--	--	--	--	--	--	
3711	0004	3	6	OV/CP	MAN/T	ND	1	R	?	J		--	--	--	15.8	7.2	31.0	--	--	--	--	--	--	
3766	0039	3	6	OV/CP	MAN/T	ND	1	L	?	J		15.1	6.5	23.5	17.7	7.3	--	--	--	--	--	--	--	
3765	0126	3	5	OV/CP	MAN/T	ND	1	R	?	J		--	--	27.0	--	--	--	--	--	--	--	--	--	
3765	01[illegible]	3	6	OV/CP	MAN/T	ND	1	R	?	J		15.8	6.5	26.8	--	--	--	--	--	--	--	--	--	
3765	[illegible]15	3	6	OV/CP	MAN/T	ND	1	R	?	8		E 11.3	7.4	8.5	14.2	8.3	22.2	--	--	--	--	--	--	
37[illegible]	0001	3	6	OV/CP	MAN/T	ND	1	L	?	A		--	--	--	12.2	7.9	13.5	22.5	8.5	15.5	6.3	--	--	
3[illegible]61	0044	3	6	OV/CP	MAN/T	ND	1	R	?	A		11.5	8.0	7.1	--	--	--	--	--	--	--	--	--	
3763	0109	3	5	OV/CP	MAN/T	ND	1	L	?	A		--	--	24.2	--	--	--	--	--	--	--	--	--	
3763	0109	3	6	OV/CP	MAN/T	ND	1	L	?	A		10.7	7.3	7.7	--	--	--	--	--	--	--	--	--	
3761	0044	3	5	OV/CP	MAN/T	ND	1	R	?	A		--	--	23.0	--	--	--	--	--	--	--	--	--	

KEY IDENTIFICATION CHARAC. MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

LOC	BON	F	M	ANM	ELM	DOM	C	S	SX	A	B	C	M1	C	M2	C	M3	C	M4	C	M5	C	M6	C	M7	C	M8	C	M9	C	M10	C	M11	C	M12	COMMENT
3745	0004	3	6	OV/CP	MAN/T	ND	1	L	?	S			13.3		7.8		14.3		16.4		8.1		28.0		23.0		7.8		40.0	E	5.6		--		--	
3746	0015	3	5	OV/CP	MAN/T	ND	1	R	?	A			63.5		43.0		19.5		--		--		--		--		--		--		--		--		--	
3746	0015	3	6	OV/CP	MAN/T	ND	1	R	?	A			9.7		7.0		4.0		12.7		7.8		12.0		20.8		7.6		16.8		4.2		--		--	
3750	000'	3	6	OV/CP	MAN/T	ND	1	L	?	8			--		--		--		14.0		8.7		15.4		26.0		9.0		22.5		5.9		--		--	
3738	0022	3	6	OV/CP	MAN/T	ND	1	R	?	8			--		--		--		--		--		--	E	25.0		8.7		28.0		4.6		--		--	
3742	0004	3	6	OV/CP	MAN/T	ND	1	L	?	I			15.8		6.7		7.0		--		--		--		--		--		--		--		--		--	
3742	0005	3	6	OV/CP	MAN/T	ND	1	L	?	8			--		--		--		15.4	E	7.9	E	24.0	E	24.0	E	8.2	E	33.6		5.6		--		--	
3745	0004	3	5	OV/CP	MAN/T	ND	1	L	?	S			--		50.0		--		--		--		24.5		--		--		--		--		--		--	
3736	0031	3	5	OV/CP	MAN/T	ND	1	R	?	8			71.0		47.5		22.5		--		--		22.0		--		--		--		--		--		--	
3736	0031	3	6	OV/CP	MAN/T	ND	1	R	?	8			11.0		7.3		10.0		13.5		7.6		20.0		23.0		7.6		28.5		4.4		--		--	
3732	0030	3	6	OV/CP	MAN/T	ND	1	L	?	A			--		--		--	E	11.3	E	7.5		5.0		20.9		8.3		6.5		5.3		--		--	
3732	0035	3	6	OV/CP	MAN/T	ND	1	L	?	J			13.3		7.3		15.0		--		--		--		--		--		--		--		--		--	
3732	0029	3	5	OV/CP	MAN/T	ND	1	R	?	8			--		43.5		--		--		--		21.0		--		--		--		--		--		--	
3732	0029	3	6	OV/CP	MAN/T	ND	1	R	?	8			9.5		7.0		6.0		12.9		7.9	E	17.0		21.0		7.6		21.5		4.4		--		--	
1908	0001	3	6	OV/CP	MAN/T	ND	1	L	?	A			--		--		--		12.5		9.1		5.5		24.5		8.5		14.0		6.1		--		--	
1906	0027	3	6	OV/CP	MAN/T	ND	1	L	?	8			--		--		--		13.6		8.1		13.5		22.2		8.2		23.0		4.6		--		--	
1906	0028	3	6	OV/CP	MAN/T	ND	1	L	?	6	7		--		--		--		--		--		--		23.6		7.7	E	32.5		4.8		--		--	
1904	0015	3	6	OV/CP	MAN/T	ND	1	L	?	A			--		--		--		14.5		9.4		15.0		--		--		--		--		--		--	
1901	0012	3	5	OV/CP	MAN/T	ND	1	R	?	A	7		--		--		12.7		--		--		--		--		--		--		--		--		--	
1314	0001	3	5	OV/CP	MAN/T	ND	1	R	?	S			78.9		52.3		25.0		--		--		--		--		--		--		--		--		--	
1314	0001	3	6	OV/CP	MAN/T	ND	1	R	?	S			12.8		7.7		17.5		15.5		8.2		34.3		24.1		8.5		38.2		5.4		--		--	
1315	0005	3	5	OV/CP	MAN/T	ND	1	R	?	J			--		--		27.0		--		--		24.0		--		--		--		--		--		--	
1315	0005	3	6	OV/CP	MAN/T	ND	1	R	?	J			13.8		7.8		14.5		17.5		8.2		28.8		--		--		--		--		--		--	
0716	0013	3	6	OV/CP	MAN/T	ND	1	R	?	J			14.0		7.4		20.5		17.4		7.7		32.7		--		--		--		--		--		--	
1339	0004	3	6	OV/CP	MAN/T	ND	1	L	?	I			15.3		6.7	E	27.3		--		--		--		--		--		--		--		--		--	
1334	0010	3	5	OV/CP	MAN/T	ND	1	R	?	8			--	E	46.0		--		--		--		--		--		--		--		--		--		--	
1334	0010	3	6	OV/CP	MAN/T	ND	1	R	?	8			11.9		7.0	E	11.1		14.5		8.4		23.5	E	20.5		7.9		32.5		3.7		--		--	
1334	0018	3	6	OV/CP	MAN/T	ND	1	L	?	6			13.0		7.8		21.2		15.0		8.1		28.6		23.5		8.1		35.5		5.3		--		--	
1323	0020	3	6	OV/CP	MAN/T	ND	1	L	?	A			11.2		7.5	E	12.2		13.9		8.0		18.6		--		--		--		--		--		--	
0323	0019	3	6	OV/CP	MAN/T	ND	1	R	?	S			12.8		7.4		15.8		--		--		--		--		--		--		--		--		--	
1360	0002	3	5	OV/CP	MAN/T	ND	1	L	?	8			--		--		23.2		--		--		--		--		--		--		--		--		--	
1367	0006	3	6	OV/CP	MAN/T	ND	1	R	?	A			--		--		--		--		--		--	E	21.5		7.8		26.2		4.6		--		--	
1347	0006	3	5	OV/CP	MAN/T	ND	1	L	?	8			--		--		21.8		--		--		--		--		--		--		--		--		--	
1347	0006	3	6	OV/CP	MAN/T	ND	1	L	?	8			12.3		7.2		12.0		15.0		8.4		24.1		--		--		--		--		--		--	
1353	0001	3	6	OV/CP	MAN/T	ND	1	R	?	J			13.2	E	7.1		--	E	15.3		7.2	E	27.8		--		--		--		--		--		--	
1343	0005	3	6	OV/CP	MAN/T	ND	1	L	?	8			--		--		--		--		--		--	E	22.5		8.8		26.5		5.8		--		--	
1343	0006	3	6	OV/CP	MAN/T	ND	1	L	?	A			11.0		8.2		8.5		12.7		8.1		11.8		--		--		--		--		--		--	
1343	0007	3	6	OV/CP	MAN/T	ND	1	L	?	6			13.6		7.6		18.4		18.3		7.7		31.5		--		--		--		--		--		--	
1342	0008	3	6	OV/CP	MAN/T	ND	1	L	?	S			--		--		--		14.6		8.1		22.8		22.5		7.3	E	32.0		4.7		--		--	
1343	0003	3	5	OV/CP	MAN/T	ND	1	R	?	6			--		--		23.3		--		--		20.4		--		--		--		--		--		--	
1343	0003	3	6	OV/CP	MAN/T	ND	1	R	?	6			12.2		6.9		17.5		--		--		--		--		--		--		--		--		--	
0710	0003	3	6	OV/CP	MAN/T	ND	1	R	?	8			--		--		--		14.1		8.1		20.5		--		--		--		--		--		--	
0321	0015	3	6	OV/CP	MAN/T	ND	1	L	?	A			11.1		7.1		6.2		--		8.1		14.6		--		--		--		--		--		--	
1372	0008	3	5	OV/CP	MAN/T	ND	1	L	?	I			--		--		28.9		--		--		--		--		--		--		--		--		--	
1372	0009	3	6	OV/CP	MAN/T	ND	1	R	FC	Y			--		--		--		14.1		8.6		16.0	E	21.5		8.3		25.0		--		--		--	
0872	0001	3	5	OV/CP	MAN/T	ND	1	R	?	A			--		--		22.2		--		--		--		--		--		--		--		--		--	
0872	0001	3	6	OV/CP	MAN/T	ND	1	R	?	A			11.0		6.9		9.0		--		--		--		--		--		--		--		--		--	
0755	0011	3	6	OV/CP	MAN/T	ND	1	R	?	S			--		--		--		13.6		7.4		22.5		22.3		7.7		29.0		4.5		--		--	
0322	0004	3	6	OV/CP	MAN/T	ND	1	L	?	6			13.0		7.4		18.6		--		--		--		--		--		--		--		--		--	
0311	0026	3	6	OV/CP	MAN/T	ND	1	L	?	S			--		--		--		14.7		8.4		23.2	E	23.0		8.1	E	35.0		5.3		--		--	
0312	0027	3	5	OV/CP	MAN/T	ND	1	R	?	A			--		--		21.0		--		--		23.5		--		--		--		--		--		--	
0311	0027	3	6	OV/CP	MAN/T	ND	1	R	?	A			--		--		--	E	13.0		8.7		9.3		--		--		--		--		--		--	
0846	0005	3	6	OV/CP	MAN/T	ND	1	R	?	S			--		--		--		13.5		7.1		23.8		21.5		6.6		32.0		4.2		--		--	
0761	0002	3	6	OV/CP	MAN/T	ND	1	L	?	8			12.4		8.1		12.7		16.2		9.3		23.0		--		--		--		--		--		--	
0722	0011	3	6	OV/CP	MAN/T	ND	1	L	?	I			17.1		6.2		--		--		--		--		--		--		--		--		--		--	
0712	0002	3	6	OV/CP	MAN/T	ND	1	R	?	J			15.0		7.6		27.0		18.0		7.3	E	32.5		--		--		--		--		--		--	
3772	0008	3	6	OV/CP	MAN/T	ND	1	R	?	4			14.7		6.3		24.0		--		--		--		--		--		--		--		--		--	
3772	0008	3	5	OV/CP	MAN/T	ND	1	R	?	4			--		--		27.0		--		--		--		--		--		--		--		--		--	
1918	0094	3	1	OV/CP	MAN/T	ND	1	L	?	A			9.8		7.1		5.0		--		--		--		--		--		--		--		--		--	
1918	0094	3	6	OV/CP	MAN/T	ND	1	L	?	A			9.8		7.1		5.0		--		--		--		--		--		--		--		--		--	
1915	0092	3	6	OV/CP	MAN/T	ND	1	R	?	A			--		--		--		10.9		8.1		10.3		23.0		8.6		11.0		6.1		--		--	
1916	0037	3	6	OV/CP	MAN/T	ND	1	L	?	A			--		--		--		--		--		--		25.6		8.9		17.0		5.7		--		--	
0849	0004	3	6	OV/CP	MAN/T	ND	1	L	?	J			14.9		7.3		23.0		18.8		7.7	E	34.5		--		--		--		--		--		--	
0849	0007	3	6	OV/CP	MAN/T	ND	1	R	?	J			13.4		7.9		19.6		15.9		7.8		33.8		--		--		--		--		--		--	
0745	0039	3	6	OV/CP	MAN/T	ND	1	L	?	8			12.2		8.0		10.0		--		--		--		--		--		--		--		--		--	
0745	0043	3	5	OV/CP	MAN/T	ND	1	R	?	S			--		--		24.0		--		--		--		--		--		--		--		--		--	
0745	0043	3	6	OV/CP	MAN/T	ND	1	R	?	S			12.9		7.0		17.0		--		--		--		--		--		--		--		--		--	
0745	0036	3	5	OV/CP	MAN/T	ND	1	L	?	J			--		--		26.9		--		--		--		--		--		--		--		--		--	
0729	0033	3	6	OV/CP	MAN/T	ND	1	R	?	J		E	13.0		--		--		19.3	E	8.0	E	32.5		--		--		--		--		--		--	
0729	0034	3	6	OV/CP	MAN/T	ND	1	R	?	J			--		--		--	E	16.0		7.6		30.0		--		--		--		--		--		--	
0720	0012	3	5	OV/CP	MAN/T	ND	1	R	?	8			--		--		--		--		--		24.3		--		--		--		--		--		--	
0720	0012	3	6	OV/CP	MAN/T	ND	1	R	?	8		E	10.0		7.3		9.5	E	13.3		7.7		16.0		--		--		--		--		--		--	
0705	0008	3	6	OV/CP	MAN/T	ND	1	R	?	4			14.7		7.4		25.0		17.8		7.2		--		--		--		--		--		--		--	
0868	0003	3	6	OV/CP	MAN/T	ND	1	L	?	J			--		--		--		18.4		7.0		37.0		--		7.3		--		6.2		--		--	
0748	0001	3	6	OV/CP	MAN/T	ND	1	R	?	S			11.3		7.8		10.5		13.9		7.9		22.5		22.9		7.4		30.0		4.9		--		--	
0748	0001	3	5	OV/CP	MAN/T	ND	1	R	?	S			--		--		28.0		--		12.7		20.0		--		--		--		--		--		--	
0728	0017	3	6	OV/CP	MAN/T	ND	1	R	?	S			--		--		--		--		--		--		22.3		7.2		30.5		4.6		--		--	
1914	0035	3	5	OV/CP	MAN/T	ND	1	L	?	A			69.0		--		--		--		--		--		--		--		--		--		--		--	
1914	0035	3	6	OV/CP	MAN/T	ND	1	L	?	A			--		--		--		--		--		--	E	22.0	E	8.0		10.0		--		--		--	
0825	0005	3	6	OV/CP	MAN/T	ND	1	L	?	6			12.3		8.1		10.7		17.0		8.6		24.5		23.5		7.0		33.7		4.8		--		--	
0820	0004	3	6	OV/CP	MAN/T	ND	1	L	?	J			14.5		7.7		24.0		17.8		7.9		35.0		--		--		--		--		--		--	
1923	0053	3	6	OV/CP	MAN/T	ND	1	R	?	J			15.7		7.9		24.0		18.6		7.8		34.0		--		--		--		--		--		--	
1932	0061	3	6	OV/CP	MAN/T	ND	1	L	?	S			13.5		7.7		16.5		17.4		7.6		31.0		--		--		--		--		--		--	
1932	0058	3	5	OV/CP	MAN/T	ND	1	R	?	A			--		--		24.5		--		--		--		--		--		--		--		--		--	
1932	0059	3	5	OV/CP	MAN/T	ND	1	R	?	8			--		--		24.5		--		13.3		21.5		--		--		--		--		--		--	
1932	0059	3	6	OV/CP	MAN/T	ND	1	R	?	8			13.4		7.6		13.5		15.9		8.0		29.0		22.0		7.8		37.0		4.6		--		--	
1932	0060	3	6	OV/CP	MAN/T	ND	1	R	?	8			--		--		--		13.5		8.2		14.5		--		--		--		--		--		--	
1930	0037	3	6	OV/CP	MAN/T	ND	1	L	?	A			10.9		8.2		5.0		--		--		--		--		--		--		--		--		--	
1930	0038	3	6	OV/CP	MAN/T	ND	1	L	?	A			--		--		--		11.0		7.9		7.0		--		8.5		10.0		--		--		--	
1930	0039	3	6	OV/CP	HAN/T	ND	1	L	?	A			--		--		--		13.5		7.8		10.5		22.7		8.3		16.5		6.0		--		--	
1930	0040	3	6	OV/CP	MAN/T	ND	1	L	?	8			12.4		7.8		10.0		14.8		7.5		23.0		23.0		8.1		17.8		5.5		--		--	
1930	0035	3	5	OV/CP	MAN/T	ND	1	L	?	A			--		--		25.0		--		--		--		--		--		--		--		--		--	
1930	0036	3	6	OV/CP	MAN/T	ND	1	L	?	A			11.5		7.8		8.5		--		--		--		--		--		--		--		--		--	
1925	0025	3	6	OV/CP	MAN/T	ND	1	R	?	6			12.1		7.7		13.0		--		8.1		24.5	E	20.0		8.2		30.0		6.0		--		--	
1925	0026	3	5	OV/CP	MAN/T	ND	1	L	?	8			--		--		25.0		--		--		--		--		--		--		--		--		--	
1925	0026	3	6	OV/CP	MAN/T	ND	1	L	?	8			11.9		8.4		10.3		--		--		--		--		--		--		--		--		--	
0854	0015	3	6	OV/CP	MAN/T	ND	1	L	?	4			15.1		7.5		18.7		19.3		8.0	E	32.5		--		--		--		--		--		--	
0654	0016	3	6	OV/CP	MAN/T	ND	1	L	?	A			10.6		8.2		6.5		13.3		8.6		10.0	E	23.5		9.5		13.0		6.5		--		--	
0785	0006	3	6	OV/CP	MAN/T	ND	1	R	?	J			13.5		7.6		16.5		--		--		--		--		--		--		--		--		--	
0785	0007	3	5	OV/CP	MAN/T	ND	1	R	?	4			--		--		30.0		--		--		--		--		--		--		--		--		--	

KEY IDENTIFICATION CHARAC. MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

LOC	BON	F	M	ANM	ELM	DOM	C	S	SX	A	B	C M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
0171	0037	3	6	OV/CP	MAN/T	ND	1	L	?	6		13.4	7.5	E 20.0	E 17.5	E 8.5	E 25.0	--	--	--	--	--	--	
0171	0038	3	5	OV/CP	MAN/T	ND	1	L	?	J		--	46.0	--	--	--	--	--	--	--	--	--	--	
0171	0938	3	6	OV/CP	MAN/T	ND	1	L	?	J		11.6	6.2	22.0	15.2	6.1	33.5	E 20.0	5.4	--	3.1	--	--	
0171	0039	3	6	OV/CP	MAN/T	ND	1	L	?	J		--	--	--	--	--	--	21.8	7.3	33.5	4.8	--	--	
0171	0036	3	6	OV/CP	MAN/T	ND	1	L	?	6		--	--	--	--	--	--	E 22.5	7.5	E 32.5	5.7	--	--	
0171	0037	3	5	OV/CP	MAN/T	ND	1	L	?	6		--	--	28.0	--	--	--	--	--	--	--	--	--	
0159	0231	3	6	OV/CP	MAN/T	ND	1	L	?	4		15.8	7.0	27.0	16.6	7.1	--	--	--	--	--	--	--	
0159	0221	3	6	OV/CP	MAN/T	ND	1	R	?	I		15.1	6.7	--	--	--	--	--	--	--	--	--	--	
0159	0229	3	6	OV/CP	MAN/T	ND	1	L	?	4		14.5	6.7	25.6	--	--	--	--	--	--	--	--	--	
0159	0194	3	6	OV/CP	MAN/T	ND	1	R	?	I		14.7	6.2	24.5	--	--	--	--	--	--	--	--	--	
0159	0201	3	6	OV/CP	MAN/T	ND	1	R	?	A		13.0	8.3	9.0	--	--	--	--	--	--	--	--	--	
0159	0153	3	5	OV/CP	MAN/T	ND	1	R	?	A		--	--	23.9	--	--	--	--	--	--	--	--	--	
0159	0148	3	5	OV/CP	MAN/T	ND	1	L	?	A		--	--	22.5	--	11.7	20.4	--	--	--	--	--	--	
0159	0149	3	5	OV/CP	MAN/T	ND	1	L	?	A		--	47.6	--	--	--	19.6	--	--	--	--	--	--	
0159	0149	3	6	OV/CP	MAN/T	ND	1	L	?	A		11.3	7.7	8.0	13.2	8.4	18.0	23.0	9.0	26.0	6.9	--	--	
0159	0152	3	6	OV/CP	MAN/T	ND	1	R	?	4	8	15.5	6.6	25.6	--	--	--	--	--	--	--	--	--	
0159	0146	3	5	OV/CP	MAN/T	ND	1	L	?	6		--	--	25.5	--	--	--	--	--	--	--	--	--	
0159	0145	3	6	OV/CP	MAN/T	ND	1	L	?	6		13.0	7.0	16.5	16.7	7.7	29.2	--	--	--	--	--	--	
0159	0147	3	5	OV/CP	MAN/T	ND	1	L	?	A		--	--	25.0	--	12.8	21.8	--	--	--	--	--	--	
0159	0147	3	6	OV/CP	MAN/T	ND	1	L	?	A		12.6	8.1	8.8	--	--	--	--	--	--	--	--	--	
0159	0142	3	5	OV/CP	MAN/T	ND	1	L	?	J		--	--	30.0	--	11.5	--	--	--	--	--	--	--	
0159	0142	3	6	OV/CP	MAN/T	ND	1	L	?	J		12.9	6.9	18.0	16.3	6.7	30.7	--	--	--	--	--	--	
0159	0144	3	6	OV/CP	MAN/T	ND	1	L	?	I		16.8	6.7	--	--	--	--	--	--	--	--	--	--	
0159	0145	3	5	OV/CP	MAN/T	ND	1	L	?	A		--	--	25.0	--	--	--	--	--	--	--	--	--	
0159	0141	3	5	OV/CP	MAN/T	ND	1	R	?	A		--	44.4	--	--	--	--	--	--	--	--	--	--	
0159	0141	3	6	OV/CP	MAN/T	ND	1	R	?	A		9.3	6.8	E 11.0	12.1	7.6	E 18.0	21.6	7.7	23.5	4.7	--	--	
1933	0039	3	5	OV/CP	MAN/T	ND	1	R	?	8		--	--	24.0	--	--	--	--	--	--	--	--	--	
1933	0039	3	6	OV/CP	MAN/T	ND	1	R	?	8		12.0	7.4	10.6	15.2	8.8	22.5	--	--	--	--	--	--	
1933	0036	3	5	OV/CP	MAN/T	ND	1	L	?	6		--	--	--	E 36.0	14.0	--	--	--	--	--	--	--	
1933	0036	3	6	OV/CP	MAN/T	ND	1	L	?	6		12.5	8.2	13.5	16.5	8.6	27.2	E 21.5	8.3	32.0	6.5	--	--	
1933	0037	3	6	OV/CP	MAN/T	ND	1	L	?	6		--	--	--	16.0	8.2	28.0	E 20.5	8.3	E 20.0	4.0	--	--	
1931	0033	3	5	OV/CP	MAN/T	ND	1	L	?	6		--	--	26.5	--	--	--	--	--	--	--	--	--	
1931	0033	3	5	OV/CP	MAN/T	ND	1	L	?	6		--	--	26.5	--	--	--	--	--	--	--	--	--	
1931	0033	3	6	OV/CP	MAN/T	ND	1	L	?	6		13.8	7.5	17.8	16.0	8.1	31.5	E 22.0	7.8	E 40.0	4.2	--	--	
0866	0006	3	6	OV/CP	MAN/T	ND	1	R	?	A		10.0	6.5	2.5	--	--	--	--	--	--	--	--	--	
0866	0006	3	5	OV/CP	MAN/T	ND	1	R	?	A		--	--	23.8	--	12.5	19.5	--	--	--	--	--	--	
0822	0013	3	5	OV/CP	MAN/T	ND	1	R	?	A		--	51.0	--	--	--	--	--	--	--	--	--	--	
0822	0013	3	6	OV/CP	MAN/T	ND	1	R	?	A		--	--	--	--	--	--	25.0	--	--	--	--	--	
0822	0011	3	6	OV/CP	MAN/T	ND	1	L	?	J		14.6	6.7	21.5	--	--	--	--	--	--	--	--	--	
0793	0005	3	6	OV/CP	MAN/T	ND	1	R	?	S		--	--	--	16.0	7.7	30.0	24.3	7.8	38.0	4.3	--	--	
0793	0006	3	6	OV/CP	MAN/T	ND	1	R	?	8		11.8	6.8	11.8	14.3	7.8	21.0	23.0	7.6	27.5	5.6	--	--	
0732	0001	3	5	OV/CP	MAN/T	ND	1	L	?	6		--	--	25.7	--	13.8	21.2	--	--	--	--	--	--	
0732	0001	3	6	OV/CP	MAN/T	ND	1	L	?	6		--	--	--	16.5	7.6	29.5	--	--	--	--	--	--	
0175	0015	3	6	OV/CP	MAN/T	ND	1	L	?	8		11.3	7.1	E 18.0	14.0	7.4	25.0	21.7	7.1	31.3	4.7	--	--	
0175	0016	3	5	OV/CP	MAN/T	ND	1	R	?	I		--	--	32.0	--	--	18.0	--	--	--	--	--	--	
0175	0016	3	6	OV/CP	MAN/T	ND	1	R	?	I		E 16.5	E 7.0	E 28.5	--	--	--	--	--	--	--	--	--	
0175	0017	3	5	OV/CP	MAN/T	ND	1	L	?	8		--	--	25.5	--	--	--	--	--	--	--	--	--	
0175	0013	3	5	OV/CP	MAN/T	ND	1	R	?	I		--	--	33.0	--	--	23.5	--	--	--	--	--	--	
0175	0013	3	6	OV/CP	MAN/T	ND	1	R	?	I		16.7	6.8	30.0	--	--	--	--	--	--	--	--	--	
0175	0014	3	6	OV/CP	MAN/T	ND	1	R	?	6		--	--	--	--	--	--	E 22.5	6.9	--	5.2	--	--	
0175	0015	3	5	OV/CP	MAN/T	ND	1	L	?	8		73.3	49.1	23.4	--	--	--	--	--	--	--	--	--	
0175	0004	3	6	OV/CP	MAN/T	ND	1	R	?	J		13.1	7.4	E 20.0	16.9	7.6	28.8	--	--	--	--	--	--	
0170	0005	3	5	OV/CP	MAN/T	ND	1	R	?	A		--	--	--	--	--	--	33.2	--	--	--	--	--	
0170	0005	3	6	OV/CP	MAN/T	ND	1	R	?	A		--	--	--	--	--	--	21.5	8.0	E 10.5	5.7	--	--	
0165	0036	3	6	OV/CP	MAN/T	ND	1	R	?	A		--	--	--	11.7	7.3	E 5.8	E 22.0	7.8	E 7.5	E 5.0	--	--	
0165	0037	3	6	OV/CP	MAN/T	ND	1	R	?	4		13.8	7.2	25.5	17.8	7.0	--	--	--	--	--	--	--	
0166	0001	3	5	OV/CP	MAN/T	ND	1	R	?	A		--	47.8	--	--	--	--	34.3	--	--	--	--	--	
0166	0001	3	6	OV/CP	MAN/T	ND	1	R	?	A		11.4	7.8	8.0	13.5	8.4	E 16.0	23.1	8.8	E 26.0	6.2	--	--	
0165	0033	3	6	OV/CP	MAN/T	ND	1	L	?	S		--	--	--	14.4	7.9	21.1	21.8	7.3	E 28.0	3.6	--	--	
0165	0034	3	6	OV/CP	MAN/T	ND	1	L	?	A		11.6	8.2	6.5	--	--	--	--	--	--	--	--	--	
0165	0035	3	5	OV/CP	MAN/T	ND	1	L	?	I		--	--	29.8	--	--	--	--	--	--	--	--	--	
0165	0035	3	6	OV/CP	MAN/T	ND	1	L	?	I		16.0	7.0	E 27.5	--	--	--	--	--	--	--	--	--	
0164	0001	3	6	OV/CP	MAN/T	ND	1	R	?	A		--	--	--	10.9	7.5	E 3.5	22.0	8.1	E 6.0	E 5.5	--	--	
0163	0003	3	6	OV/CP	MAN/T	ND	1	L	?	8		11.4	7.3	12.5	--	--	--	--	--	--	--	--	--	
0164	0001	3	5	OV/CP	MAN/T	ND	1	R	?	A		--	40.3	--	--	--	--	--	--	--	--	--	--	
0163	0002	3	5	OV/CP	MAN/T	ND	1	L	?	A		--	--	22.6	--	--	--	--	--	--	--	--	--	
0163	0003	3	5	OV/CP	MAN/T	ND	1	L	?	8		--	--	24.5	--	--	--	--	--	--	--	--	--	
0161	0002	3	6	OV/CP	MAN/T	ND	1	L	?	8		--	--	--	13.1	7.8	19.7	--	--	--	--	--	--	
0161	0003	3	6	OV/CP	MAN/T	ND	1	L	?	8		10.5	7.0	E 9.5	14.0	8.0	21.0	--	--	--	--	--	--	
0161	0001	3	6	OV/CP	MAN/T	ND	1	R	?	8		11.5	7.8	10.4	13.2	7.8	20.0	23.0	7.9	33.0	4.2	--	--	
1937	0052	3	5	OV/CP	MAN/T	ND	1	L	?	8		--	--	22.8	--	--	--	--	--	--	--	--	--	
1937	0052	3	6	OV/CP	MAN/T	ND	1	L	?	8		10.5	7.0	7.0	--	--	--	--	--	--	--	--	--	
1938	0044	3	6	OV/CP	MAN/T	ND	1	R	?	8		--	--	--	16.2	9.0	25.0	--	--	--	--	--	--	
1939	0011	3	6	OV/CP	MAN/T	ND	1	R	?	8		--	--	--	13.7	8.2	14.5	E 20.0	8.0	22.0	4.7	--	--	
1936	0049	3	5	OV/CP	MAN/T	ND	1	L	?	6		--	--	27.5	--	--	--	--	--	--	--	--	--	
1936	0049	3	6	OV/CP	MAN/T	ND	1	L	?	6		13.2	--	21.0	17.8	--	32.0	--	--	--	--	--	--	
1937	0051	3	6	OV/CP	MAN/T	ND	1	L	?	8		10.7	7.8	6.0	13.6	8.3	17.7	22.1	8.2	27.3	5.2	--	--	
1935	0030	3	6	OV/CP	MAN/T	ND	1	R	?	6		--	--	--	17.5	7.7	32.0	--	--	--	--	--	--	
0215	0041	3	5	OV/CP	MAN/T	ND	1	L	?	I		--	--	30.8	--	--	--	--	--	--	--	--	--	
0215	0040	3	5	OV/CP	MAN/T	ND	1	L	?	A		--	--	24.5	--	--	--	--	--	--	--	--	--	
0215	0040	3	6	OV/CP	MAN/T	ND	1	L	?	A		11.5	7.4	7.5	--	--	--	--	--	--	--	--	--	
0212	0004	3	5	OV/CP	MAN/T	ND	1	R	?	I		--	--	26.5	--	9.5	17.5	--	--	--	--	--	--	
0212	0004	3	6	OV/CP	MAN/T	ND	1	R	?	I		15.5	6.4	--	--	--	--	--	--	--	--	--	--	
0211	0004	3	6	OV/CP	MAN/T	ND	1	R	?	I		14.8	6.8	27.4	--	--	--	--	--	--	--	--	--	
0212	0003	3	5	OV/CP	MAN/T	ND	1	L	?	J		--	--	30.0	--	12.5	24.6	--	--	--	--	--	--	
0212	0003	3	6	OV/CP	MAN/T	ND	1	L	?	J		E 15.5	7.5	26.0	--	--	--	--	--	--	--	--	--	
0206	0041	3	5	OV/CP	MAN/T	ND	1	R	?	8		--	--	--	--	11.6	--	--	--	--	--	--	--	
0207	0004	3	6	OV/CP	MAN/T	ND	1	R	?	A		--	--	--	13.0	7.5	E 5.0	--	--	--	--	--	--	
0197	0023	3	6	OV/CP	MAN/T	ND	1	L	?	J		--	--	--	16.7	7.4	32.0	--	--	--	--	--	--	
0197	0021	3	5	OV/CP	MAN/T	ND	1	L	?	8		--	--	--	E 35.0	12.6	--	--	--	--	--	--	--	
0183	0010	3	5	OV/CP	MAN/T	ND	1	L	?	J		--	--	29.3	--	--	--	--	--	--	--	--	--	
0182	0004	3	5	OV/CP	MAN/T	ND	1	L	?	4		--	--	--	--	--	20.3	--	--	--	--	--	--	
0182	0004	3	6	OV/CP	MAN/T	ND	1	L	?	4		13.9	5.9	24.5	--	--	--	--	--	--	--	--	--	
0713	3017	3	5	OV/CP	MAN/T	ND	1	L	?	6		--	--	--	--	12.5	--	--	--	--	--	--	--	
0713	0017	3	6	OV/CP	MAN/T	ND	1	L	?	6		13.5	6.8	20.5	--	--	--	--	--	--	--	--	--	
2303	0001	3	5	OV/CP	MAN/T	ND	1	L	?	8		E 69.0	E 46.0	22.7	34.0	11.8	--	--	--	--	--	--	--	
2303	0001	3	6	OV/CP	MAN/T	ND	1	L	?	8		11.0	7.3	7.2	13.4	8.2	16.5	E 21.5	8.0	27.0	4.3	--	--	
2104	0001	3	6	OV/CP	MAN/T	ND	1	R	?	J		13.3	6.9	21.0	16.8	6.9	31.5	--	--	--	--	--	--	
0214	0003	3	5	OV/CP	MAN/T	ND	1	R	?	I		--	--	30.5	--	--	--	--	--	--	--	--	--	
0205	0001	3	5	OV/CP	MAN/T	ND	1	R	?	8		--	--	22.3	--	13.4	20.5	--	--	--	--	--	--	

KEY IDENTIFICATION CHARAC. MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

LOC	BON	F	M	ANM	ELM	DOM	C	S	SX	A	B	C M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
0205	0001	3	6	OV/CP	MAN/T	ND	1	R	?	8		11.5	6.7	11.6	14.3	7.9	23.0	--	--	--	--	--	--	
0199	0008	3	6	OV/CP	MAN/T	ND	1	L	?	A		11.3	7.3	6.0	E 14.0	8.4	--	--	--	--	--	--	--	
0199	0010	3	6	OV/CP	MAN/T	ND	1	L	?	A		--	--	--	--	--	--	--	8.8	10.0	6.4	--	--	
0203	0011	3	5	OV/CP	MAN/T	ND	1	R	?	8		72.2	E 49.5	29.8	40.0	13.8	--	--	--	--	--	--	--	
0203	0011	3	6	OV/CP	MAN/T	ND	1	R	?	8		--	--	--	--	--	--	23.5	8.8	24.0	6.2	--	--	
0198	0013	3	6	OV/CP	MAN/T	ND	1	R	?	J		14.4	7.5	24.3	17.3	7.4	35.0	--	--	--	--	--	--	
0199	0007	3	5	OV/CP	MAN/T	ND	1	L	?	I		--	--	30.5	--	--	--	--	--	--	--	--	--	
0199	0008	3	5	OV/CP	MAN/T	ND	1	L	?	A		--	--	21.3	E 33.0	12.9	19.5	--	--	--	--	--	--	
0198	0013	3	5	OV/CP	MAN/T	ND	1	R	?	J		--	--	--	--	--	23.8	--	--	--	--	--	--	
0196	0017	3	6	OV/CP	MAN/T	ND	1	R	?	J		13.7	6.9	22.4	--	--	--	--	--	--	--	--	--	
0196	0017	3	5	OV/CP	MAN/T	ND	1	R	?	J		--	--	27.6	--	--	--	--	--	--	--	--	--	
0189	0004	3	6	OV/CP	MAN/T	ND	1	L	?	4		14.8	--	--	--	--	--	--	--	--	--	--	--	
0195	0020	3	6	OV/CP	MAN/T	ND	1	R	?	J		--	--	--	15.5	7.3	29.5	--	--	--	--	--	--	
0186	0002	3	6	OV/CP	MAN/T	ND	1	R	?	I		15.1	6.9	E 21.0	--	--	--	--	--	--	--	--	--	
0189	0003	3	5	OV/CP	MAN/T	ND	1	R	?	I		--	--	36.0	--	--	--	--	--	--	--	--	--	
0186	0002	3	5	OV/CP	MAN/T	ND	1	R	?	I		--	--	30.3	--	--	--	--	--	--	--	--	--	
2111	0021	3	6	OV/CP	MAN/T	ND	1	R	?	8		--	--	--	E 15.5	E 8.2	32.0	--	--	--	--	--	--	
2110	0025	3	6	OV/CP	MAN/T	ND	1	L	?	J		15.0	8.0	24.5	--	--	--	--	--	--	--	--	--	
2108	0050	3	5	OV/CP	MAN/T	ND	1	L	?	8		--	--	23.6	--	--	--	--	--	--	--	--	--	
2108	0051	3	6	OV/CP	MAN/T	ND	1	R	?	J		--	--	--	15.8	6.8	31.8	E 21.5	7.7	--	4.2	--	--	
2309	0011	3	6	OV/CP	MAN/T	ND	1	L	?	8		10.9	7.1	5.5	13.8	8.0	12.0	22.6	E 7.6	19.5	5.0	--	--	
2112	0002	3	5	OV/CP	MAN/T	ND	1	L	?	S		--	--	--	--	--	19.2	--	--	--	--	--	--	
2112	0002	3	6	OV/CP	MAN/T	ND	1	L	?	S		11.7	6.5	E 12.5	14.3	7.8	E 25.0	--	--	--	--	--	--	
2115	0001	3	5	C//CP	MAN/T	ND	1	R	?	8		--	--	21.5	--	11.7	20.1	--	--	--	--	--	--	
2115	0001	3	6	OV/CP	MAN/T	ND	1	R	?	8		11.8	6.6	--	15.4	8.1	E 20.0	--	--	--	--	--	--	
2115	0002	3	5	OV/CP	MAN/T	ND	1	L	?	A		E 67.5	42.6	25.7	--	13.2	18.9	--	--	--	--	--	--	
0876	0002	3	5	OV/CP	MAN/T	ND	1	R	?	I		--	--	29.5	--	--	--	--	--	--	--	--	--	
0876	0002	3	6	OV/CP	MAN/T	ND	1	R	?	I		15.4	5.8	25.0	--	--	--	--	--	--	--	--	--	
0876	0003	3	5	OV/CP	MAN/T	ND	1	L	?	I		--	--	28.8	--	--	--	--	--	--	--	--	--	
0876	0003	3	6	OV/CP	MAN/T	ND	1	L	?	I		14.8	6.3	26.0	--	--	--	--	--	--	--	--	--	
0876	0001	3	5	OV/CP	MAN/T	ND	1	R	?	A		--	E 46.0	--	--	--	--	--	--	--	--	--	--	
0876	0001	3	6	OV/CP	MAN/T	ND	1	R	?	A		9.6	6.7	3.0	13.2	8.0	8.4	E 22.5	8.0	14.5	5.0	--	--	
0893	0008	3	6	OV/CP	MAN/T	ND	1	L	?	8		12.0	7.5	7.5	--	--	--	--	--	--	--	--	--	
0887	0006	3	5	OV/CP	MAN/T	ND	1	R	?	8		--	--	--	--	--	19.5	--	--	--	--	--	--	
0887	0006	3	6	OV/CP	MAN/T	ND	1	R	?	8		11.2	6.8	9.5	14.4	8.3	18.5	--	--	--	--	--	--	
0763	0008	3	5	OV/CP	MAN/T	ND	1	R	?	8		--	--	24.8	--	12.8	20.0	--	--	--	--	--	--	
2129	0007	3	5	OV/CP	MAN/T	ND	1	R	?	4		--	--	30.0	--	--	--	--	--	--	--	--	--	
2129	0007	3	6	OV/CP	MAN/T	ND	1	R	?	4		15.5	6.7	E 25.0	--	--	--	--	--	--	--	--	--	
2126	0001	3	6	OV/CP	MAN/T	ND	1	L	?	4		15.5	6.4	E 21.0	--	--	--	--	--	--	--	--	--	
2120	0001	3	6	OV/CP	MAN/T	ND	1	L	?	A		--	--	--	14.4	8.0	E 21.0	22.6	7.6	30.1	4.7	--	--	
2120	0002	3	6	OV/CP	MAN/T	ND	1	L	?	J		12.6	--	--	--	--	--	--	--	--	--	--	--	
0867	0007	3	6	OV/CP	MAN/T	ND	1	R	?	A		10.5	6.8	7.5	--	--	--	--	--	--	--	--	--	
0867	0007	3	5	OV/CP	MAN/T	ND	1	R	?	A		--	--	23.5	--	--	20.5	--	--	--	--	--	--	
0180	0001	3	1	OV/CP	MAN/T	ND	1	R	?	6	7	--	--	24.0	--	--	20.4	--	--	--	--	--	--	
0542	0001	3	5	OV/CP	MAN	ND	1	L	?	A		--	--	--	38.7	12.0	--	--	--	--	--	--	--	
0360	0002	3	5	OV/CP	MAN	ND	1	R	?	8		--	--	--	--	14.5	--	--	--	--	--	--	--	
1905	0022	3	5	OV/CP	MAN	ND	1	L	?	8		--	--	19.0	--	13.3	--	--	--	--	--	--	--	
0770	0010	3	6	OV/CP	MAN	ND	1	R	?	8		--	--	--	E 42.0	13.0	--	--	--	--	--	--	--	
0770	0010	3	5	OV/CP	MAN	ND	1	R	?	8		--	--	--	E 42.0	13.0	--	--	--	--	--	--	--	
1926	0011	3	5	OV/CP	MAN	ND	1	R	?	I		--	--	30.5	--	--	--	--	--	--	--	--	--	
0184	0004	3	1	OV/CP	ATLAS	ND	1	M	M	8		--	51.2	--	--	--	--	--	--	--	--	--	--	
2129	0009	3	1	OV/CP	ATLAS	ND	1	M	?	?	7	--	40.7	--	--	--	--	--	--	--	--	--	--	
0755	0008	3	1	OV/CP	AXIS	ND	1	M	?	?		--	--	45.4	20.2	--	--	--	--	--	--	--	--	
0853	0002	3	1	OV/CP	AXIS	ND	1	M	F	8		62.7	52.0	E 50.0	23.8	--	17.0	--	--	--	--	--	--	
1931	0015	3	1	OV/CP	AXIS	ND	1	M	?M	8		--	--	--	24.0	--	--	--	--	--	--	--	--	
0198	0027	3	1	OV/CP	AXIS	ND	1	M	?M	8		--	--	E 42.5	22.8	--	--	--	--	--	--	--	--	
3722	0020	3	1	OV/CP	SACR	ND	1	M	?	8		--	--	E 26.0	--	--	10.5	--	--	--	--	--	--	
0399	0016	3	1	OV/CP	SCAP	ND	1	R	?	?		--	--	--	22.1	--	--	--	--	--	--	--	--	
3763	0043	3	1	OV/CP	SCAP	ND	1	R	?	8		--	31.7	25.4	18.8	--	--	--	--	--	--	--	--	
1902	0008	3	1	OV/CP	SCAP	ND	1	R	?	?		20.0	--	--	22.5	22.5	--	--	--	--	--	--	--	
1321	0005	3	1	OV/CP	SCAP	ND	1	R	?	?		--	E 33.0	E 27.6	E 21.5	--	--	--	--	--	--	--	--	
1308	0001	3	1	OV/CP	SCAP	ND	4	R	?	8		--	--	E 27.5	24.8	E 27.0	--	--	--	--	--	--	--	
1918	0040	3	1	OV/CP	SCAP	ND	1	L	?	?		--	34.2	26.5	21.0	--	--	--	--	--	--	--	--	
0171	0071	3	1	OV/CP	SCAP	ND	1	R	?	?		17.5	--	--	--	--	--	--	--	--	--	--	--	
0206	0050	3	1	OV/CP	SCAP	ND	1	R	?	Y		14.1	E 24.2	21.3	E 16.5	20.0	--	--	--	--	--	--	--	
0206	0051	3	1	OV/CP	SCAP	ND	1	R	?	?		17.2	E 27.8	23.5	19.3	21.2	--	--	--	--	--	--	--	
0754	0007	3	1	OV/CP	SCAP	ND	1	R	?	8		--	--	25.5	23.3	22.2	--	--	--	--	--	--	--	
0893	0007	3	1	OV/CP	SCAP	ND	1	R	?	?		--	35.0	28.8	22.8	--	--	--	--	--	--	--	--	
2128	0012	3	1	OV/CP	SCAP	ND	1	L	?	?		--	--	25.7	22.7	--	--	--	--	--	--	--	--	
0180	0055	3	1	OV/CP	SCAP	ND	1	R	?	?		--	--	--	23.8	--	--	--	--	--	--	--	--	
0833	0008	3	1	OV/CP	SCAP	ND	1	L	?	8	6	--	30.0	22.5	19.5	--	--	--	--	--	--	--	--	
3712	0022	3	1	OV/CP	HUMER	ND	1	R	?	?		E 31.7	29.3	--	--	--	--	--	--	--	--	--	--	
3750	0042	3	1	OV/CP	HUMER	ND	1	L	?	8		--	--	17.0	--	--	--	--	--	--	--	--	--	
1918	0028	3	1	OV/CP	HUMER	ND	1	R	?	A		--	--	--	E 37.5	--	--	--	--	--	--	--	--	
0848	0011	3	1	OV/CP	HUMER	ND	1	R	?	?		--	31.5	--	--	--	--	--	--	--	--	--	--	
0171	0054	3	1	OV/CP	HUMER	ND	1	L	?	?		--	35.2	--	--	--	--	--	--	--	--	--	--	
1374	0012	3	1	OV/CP	HUMER	ND	1	L	?	?		--	30.1	--	--	--	--	--	--	--	--	--	--	
1376	C012	3	6	OV/CP	HUMER	ND	1	R	?	I		--	--	--	--	--	--	E 42.0	E 17.0	E 47.5	--	--	--	
0180	0027	3	1	OV/CP	HUMER	ND	1	R	?	8	?	--	30.3	--	--	--	--	--	--	--	--	--	--	
1329	0008	3	1	OV/CP	ULNA	ND	1	R	?	Y		--	22.7	--	--	--	--	--	--	--	--	--	--	
0214	0048	3	1	OV/CP	ULNA	ND	1	L	?	?		E 18.5	29.1	25.0	--	--	--	--	--	--	--	--	--	
2115	0034	3	1	OV/CP	ULNA	ND	1	L	?	8		E 16.0	22.5	19.3	--	--	--	--	--	--	--	--	--	
1303	0001	3	1	OV/CP	MC3+4	ND	1	R	?	?		21.9	14.6	13.0	--	--	--	--	--	--	--	--	--	
0302	0014	3	1	OV/CP	MC3+4	ND	1	R	?	6		23.9	16.0	14.3	--	--	--	91.6	--	--	--	--	--	
1905	0005	3	1	OV/CP	MC3+4	ND	1	L	?	8	7	26.3	18.7	17.6	--	--	--	--	--	--	--	--	--	
0214	0041	3	1	OV/CP	MC3+4	ND	1	R	?	?		22.4	15.6	--	--	--	--	--	--	--	--	--	--	
0196	0011	3	1	OV/CP	MC3+4	ND	1	R	?	?		23.4	16.1	--	--	--	--	--	--	--	--	--	--	
0191	0001	3	1	OV/CP	MC3+4	ND	1	R	?	?		22.2	15.1	13.2	--	--	--	--	--	--	--	--	--	
2119	0004	3	1	OV/CP	MC3+4	ND	1	R	?	?		22.3	15.0	14.1	--	--	--	--	--	--	--	--	--	
0160	0019	3	1	OV/CP	MC3+4	ND	1	R	?	?		22.2	15.8	--	--	--	--	--	--	--	--	--	--	
3711	0041	3	1	OV/CP	ILIUM	ND	1	L	?M	?		--	--	--	--	--	18.6	11.1	--	--	--	--	--	
0279	0008	3	1	OV/CP	FEMUR	ND	1	R	?	A		--	--	--	32.9	14.2	--	--	--	--	--	--	--	
0279	0009	3	1	OV/CP	FEMUR	ND	1	R	?	A		--	--	15.2	33.3	14.1	--	--	--	--	--	--	--	
3711	0032	3	1	OV/CP	FEMUR	ND	1	R	?	A		--	--	--	32.9	13.5	--	--	--	--	--	--	--	
3704	0053	3	1	OV/CP	FEMUR	ND	1	L	?	8		--	19.1	--	--	--	--	--	--	--	--	--	--	
1302	0001	3	1	OV/CP	FEMUR	ND	1	R	?	A		--	--	--	33.0	--	--	--	--	--	--	--	--	
3750	0025	3	1	OV/CP	FEMUR	ND	1	L	?	8		--	--	--	39.4	17.0	--	--	--	--	--	--	--	
3750	0026	3	1	OV/CP	FEMUR	ND	1	L	?	8		--	--	--	41.4	18.0	--	--	--	--	--	--	--	
3736	0017	3	1	OV/CP	FEMUR	ND	1	L	?	A		--	--	--	32.5	12.7	--	--	--	--	--	--	--	
0726	0001	3	1	OV/CP	FEMUR	ND	1	R	?	A		--	--	--	33.2	--	--	--	--	--	--	--	--	

KEY / IDENTIFICATION / CHARAC. / MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

LOC	BON	F	M	ANM	ELM	DOM	C	S	SX	A	B	C M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
1316	0006	3	1	OV/CP	FEMUR	ND	1	L	?	A		--	--	--	--	15.0	--	--	--	--	--	--	--	
1317	0010	3	1	OV/CP	FEMUR	ND	1	L	?	A		--	--	--	37.4	16.4	--	--	--	--	--	--	--	
0335	0002	3	1	OV/CP	FEMUR	ND	1	R	?	S		--	--	U 17.8	--	--	--	--	--	--	--	--	--	
1333	0003	3	1	OV/CP	FEMUR	ND	1	R	?	A		--	--	--	35.2	13.5	--	--	--	--	--	--	--	
0819	0003	3	1	OV/CP	FEMUR	ND	1	R	?	8	6	--	20.8	--	--	--	--	--	--	--	--	--	--	
1350	0008	3	1	OV/CP	FEMUR	ND	1	R	?	A		--	--	--	34.0	16.6	--	--	--	--	--	--	--	
0728	0004	3	1	OV/CP	FEMUR	ND	1	L	?	Y		--	U 23.1	--	--	--	--	--	--	--	--	--	--	
0159	0125	3	1	OV/CP	FEMUR	ND	1	R	?	6		--	--	--	E 38.0	--	--	--	--	--	--	--	--	
0159	0131	3	1	OV/CP	FEMUR	ND	1	L	?	J		--	21.5	--	--	--	--	--	--	--	--	--	--	
0732	0006	3	1	OV/CP	FEMUR	ND	1	R	?	J		--	U 21.4	--	--	--	--	--	--	--	--	--	--	
1936	0017	3	1	OV/CP	FEMUR	ND	1	R	?	A		--	--	--	E 37.5	15.8	--	--	--	--	--	--	--	
0182	0007	3	1	OV/CP	FEMUR	ND	1	R	?	8		--	--	--	--	16.9	--	--	--	--	--	--	--	
0196	0007	3	1	OV/CP	FEMUR	ND	1	L	?	A		--	--	--	--	15.8	--	--	--	--	--	--	--	
0187	0006	3	1	OV/CP	FEMUR	ND	1	R	?	A		--	--	--	34.2	16.2	--	--	--	--	--	--	--	
2126	0016	3	1	OV/CP	FEMUR	ND	1	L	?	8		--	19.3	--	--	--	--	--	--	--	--	--	--	
3724	0062	3	1	OV/CP	PATEL	ND	1	R	?	8		29.0	22.5	19.0	--	--	--	--	--	--	--	--	--	
0297	0005	3	1	OV/CP	PATEL	ND	1	L	?	?		19.3	E 24.0	14.9	--	--	--	--	--	--	--	--	--	
0331	0016	3	1	OV/CP	PATEL	ND	1	R	?	?		E 26.0	18.1	13.8	--	--	--	--	--	--	--	--	--	
1327	0017	3	1	OV/CP	PATEL	ND	1	L	?	?		29.1	--	--	--	--	--	--	--	--	--	--	--	
1914	0015	3	1	OV/CP	PATEL	ND	1	R	?	8		26.4	--	--	--	--	--	--	--	--	--	--	--	
1377	0003	3	1	OV/CP	PATEL	ND	1	R	?	?		E 27.5	21.7	E 16.8	--	--	--	--	--	--	--	--	--	
0159	0021	3	1	OV/CP	PATEL	ND	1	L	?	8		32.8	24.9	19.3	--	--	--	--	--	--	--	--	--	
0207	0021	3	1	OV/CP	PATEL	ND	1	R	?	?		28.0	19.4	15.5	--	--	--	--	--	--	--	--	--	
2110	0002	3	1	OV/CP	PATEL	ND	1	R	?	?		E 27.5	19.2	14.1	--	--	--	--	--	--	--	--	--	
0296	0012	3	1	OV/CP	TIBIA	ND	1	R	?	A		E 36.5	16.0	--	--	--	--	--	--	--	--	--	--	
3767	0016	3	1	OV/CP	TIBIA	ND	1	L	?	8		32.9	--	--	--	--	--	--	--	31.5	--	--	--	
0316	0003	3	1	OV/CP	TIBIA	ND	1	L	?	8		--	15.4	E 24.0	20.0	--	--	--	--	--	--	--	--	
0183	0009	3	1	OV/CP	TIBIA	ND	1	R	?	A		36.3	--	--	--	--	--	--	--	35.5	--	--	--	
3765	0016	3	1	OV/CP	TALUS	ND	1	L	?	?		E 27.0	--	--	--	E 16.5	--	--	--	--	--	--	--	
1331	0010	3	1	OV/CP	TALUS	ND	1	L	?	?		--	27.2	--	--	18.1	--	--	--	--	--	--	--	
0161	0075	3	1	OV/CP	TALUS	ND	1	R	?	?		27.8	--	14.6	--	--	--	--	--	--	--	--	--	
0161	0076	3	1	OV/CP	TALUS	ND	1	L	?	?		25.1	--	14.0	--	--	--	--	--	--	--	--	--	
0161	0074	3	1	OV/CP	TALUS	ND	1	R	?	?		27.1	--	14.4	--	--	--	--	--	--	--	--	--	
0517	0012	3	1	OV/CP	T-C+4	ND	1	R	?	?		21.6	--	--	--	--	--	--	--	--	--	--	--	
3753	0002	3	1	OV/CP	T-C+4	ND	1	L	?	?		23.2	--	--	--	--	--	--	--	--	--	--	--	
1913	0002	3	1	OV/CP	T-C+4	ND	1	L	?	?		17.7	--	--	--	--	--	--	--	--	--	--	--	
0314	0010	3	1	OV/CP	T-C+4	ND	1	L	?	?	4	22.5	--	--	--	--	--	--	--	--	--	--	--	
1915	0086	3	1	OV/CP	T-C+4	ND	1	R	?	?		22.5	--	--	--	--	--	--	--	--	--	--	--	
0159	0016	3	1	OV/CP	T-C+4	ND	1	R	?	?		19.6	--	--	--	--	--	--	--	--	--	--	--	
0159	0011	3	1	OV/CP	T-C+4	ND	1	L	?	?		22.2	--	--	--	--	--	--	--	--	--	--	--	
0159	0015	3	1	OV/CP	T-C+4	ND	1	R	?	?		20.5	--	--	--	--	--	--	--	--	--	--	--	
0161	0071	3	1	OV/CP	T-C+4	ND	1	L	?	?		20.8	--	--	--	--	--	--	--	--	--	--	--	
2301	0002	3	1	OV/CP	T-C+4	ND	1	L	?	?		22.4	--	--	--	--	--	--	--	--	--	--	--	
0183	0021	3	1	OV/CP	T-C+4	ND	1	L	?	Y		21.9	--	--	--	--	--	--	--	--	--	--	--	
2309	0065	3	1	OV/CP	T-C+4	ND	1	R	?	?	4	20.1	--	--	--	--	--	--	--	--	--	--	--	
0399	0040	3	1	OV/CP	MT3+4	ND	1	L	?	8	4	--	21.4	--	--	--	--	--	--	--	--	--	--	
0302	0017	3	1	OV/CP	MT3+4	ND	1	R	?	?		19.5	19.2	18.0	12.3	--	--	--	--	--	--	--	--	
3753	0048	3	1	OV/CP	MT3+4	ND	1	L	?	8		19.1	18.2	18.5	E 11.8	--	--	--	--	--	--	--	--	
3737	0013	3	1	OV/CP	MT3+4	ND	1	R	?	?		19.8	18.9	17.4	--	--	--	--	--	--	--	--	--	
1900	0025	3	1	OV/CP	MT3+4	ND	1	L	?	?		19.1	18.5	18.2	--	--	--	--	--	--	--	--	--	
1905	0006	3	1	OV/CP	MT3+4	ND	1	R	?	?		19.4	18.9	16.2	10.2	--	--	--	--	--	--	--	--	
1344	0002	3	1	OV/CP	MT3+4	ND	1	L	?	I		--	15.8	16.0	9.4	--	--	--	--	--	--	--	--	
1913	0001	3	1	OV/CP	MT3+4	ND	1	L	?	?		17.2	16.6	15.0	--	--	--	--	--	--	--	--	--	
3772	0006	3	1	OV/CP	MT3+4	ND	1	R	?	8		--	18.9	19.3	--	--	--	--	--	--	--	--	--	
1914	0012	3	1	OV/CP	MT3+4	ND	1	R	?	Y		--	17.0	--	--	--	--	--	--	--	--	--	--	
2113	0005	3	1	OV/CP	MT3+4	ND	1	L	?	8		--	22.2	--	--	--	--	--	--	--	--	--	--	
2108	0019	3	1	OV/CP	MT3+4	ND	1	R	?	I		17.6	17.4	16.9	--	--	--	--	--	--	--	--	--	
2127	0008	3	1	OV/CP	PH1	ND	1	5	?	4		--	--	11.9	--	--	--	--	--	--	--	--	--	
3724	0084	3	1	OV/CP	PH2	ND	1	4	?	8		21.0	12.5	9.3	8.7	--	--	--	--	--	--	--	--	
1930	0088	3	1	OV/CP	PH2	ND	1	4	?	8		25.0	12.8	--	10.1	--	--	--	--	--	--	--	--	
0783	0005	3	6	OV/CP	TTHUP	ND	1	L	?	6		--	--	--	--	--	--	16.0	--	30.0	--	--	--	
3768	0008	3	6	OV/CP	TTHUP	ND	4	R	?	I		14.0	E 8.2	29.0	--	--	--	--	--	--	--	--	--	
0525	0003	3	6	OV/CP	TTHUP	ND	1	R	?	J		15.3	10.4	25.0	--	--	--	--	--	--	--	--	--	
0526	0001	3	6	OV/CP	TTHUP	ND	1	R	?	6		15.0	10.7	21.0	--	--	--	--	--	--	--	--	--	
0550	0003	3	6	OV/CP	TTHUP	ND	1	R	?	A		--	--	--	--	--	--	E 20.0	11.2	23.6	--	--	--	
0409	0003	3	6	OV/CP	TTHUP	ND	1	R	?	4		--	--	--	18.8	11.6	32.0	--	--	--	--	--	--	
0305	0002	3	6	OV/CP	TTHUP	ND	1	R	?	A		--	--	--	--	--	--	20.7	12.1	23.5	--	--	--	
3767	0009	3	6	OV/CP	TTHUP	ND	1	L	?	6		17.5	E 11.0	25.0	--	--	--	--	--	--	--	--	--	
3767	0008	3	6	OV/CP	TTHUP	ND	1	R	?	6		--	--	--	--	--	19.3	18.0	11.3	E 35.0	--	--	--	
3724	0116	3	6	OV/CP	TTHUP	ND	1	R	?	A		--	--	--	--	--	--	21.0	14.2	14.0	--	--	--	
3724	0117	3	6	OV/CP	TTHUP	ND	1	L	?	S		--	--	--	--	--	17.3	11.3	30.0	--	--	--	--	
3715	0008	3	6	OV/CP	TTHUP	ND	1	R	?	J		15.8	10.7	E 23.0	--	--	--	--	--	--	--	--	--	
3706	0021	3	6	OV/CP	TTHUP	ND	1	R	?	8		--	--	--	--	--	--	20.2	12.1	28.0	--	--	--	
1302	0005	3	6	OV/CP	TTHUP	ND	1	R	?	4		--	--	--	17.3	10.0	33.5	--	--	--	--	--	--	
0555	0005	3	6	OV/CP	TTHUP	ND	1	R	?	S		--	--	--	--	--	--	19.8	12.7	30.0	--	--	--	
0466	0002	3	6	OV/CP	TTHUP	ND	1	R	?	6		14.8	12.0	18.5	--	--	--	--	--	--	--	--	--	
3766	0036	3	6	OV/CP	TTHUP	ND	1	R	?	I		16.7	10.1	27.0	--	--	--	--	--	--	--	--	--	
3765	0131	3	6	OV/CP	TTHUP	ND	1	L	?	8		10.1	9.9	9.2	--	--	--	--	--	--	--	--	--	
3766	0035	3	6	OV/CP	TTHUP	ND	1	L	?	J		14.9	11.6	20.0	--	--	--	--	--	--	--	--	--	
3764	0011	3	6	OV/CP	TTHUP	ND	1	R	?	6		--	--	--	15:6	--	24.0	--	--	--	--	--	--	
3764	0012	3	6	OV/CP	TTHUP	ND	1	L	?	J		14.1	11.5	23.0	--	--	--	--	--	--	--	--	--	
3765	0118	3	6	OV/CP	TTHUP	ND	1	R	?	S		--	--	--	--	--	--	17.7	11.2	30.0	--	--	--	
3765	0128	3	6	OV/CP	TTHUP	ND	1	L	?	?		15.6	10.6	24.0	--	--	--	--	--	--	--	--	--	
3764	0008	3	6	OV/CP	TTHUP	ND	1	R	?	A		--	--	--	--	--	--	20.7	13.5	13.2	--	--	--	
3764	0009	3	6	OV/CP	TTHUP	ND	1	R	?	A		--	--	--	12.6	12.1	9.0	--	--	--	--	--	--	
3764	0010	3	6	OV/CP	TTHUP	ND	1	L	?	A		--	--	--	12.5	E 13.0	10.0	--	--	--	--	--	--	
3755	0036	3	6	OV/CP	TTHUP	ND	1	L	?	?		14.7	11.6	21.0	--	--	--	--	--	--	--	--	--	
3763	0106	3	6	OV/CP	TTHUP	ND	1	L	?	S		14.8	11.1	20.8	--	--	--	--	--	--	--	--	--	
3753	0025	3	6	OV/CP	TTHUP	ND	1	R	?	J		--	--	--	16.8	10.2	E 29.0	--	--	--	--	--	--	
3742	0002	3	6	OV/CP	TTHUP	ND	1	L	?	8		--	--	--	15.3	12.4	24.5	--	--	--	--	--	--	
3712	0029	3	6	OV/CP	TTHUP	ND	1	R	?	S		15.3	11.0	22.2	--	--	--	--	--	--	--	--	--	
3713	0034	3	6	OV/CP	TTHUP	ND	1	L	?	I		E 17.0	9.2	--	--	--	--	--	--	--	--	--	--	
3710	0027	3	6	OV/CP	TTHUP	ND	1	R	?	8		--	--	--	16.0	10.9	22.4	--	--	--	--	--	--	
3711	0005	3	6	OV/CP	TTHUP	ND	1	L	?	A		--	--	--	--	--	--	17.6	12.1	23.6	--	--	--	
3711	0006	3	6	OV/CP	TTHUP	ND	1	R	?	?		--	--	--	--	--	--	16.6	--	--	--	--	--	
3704	0008	3	6	OV/CP	TTHUP	ND	1	L	?	I		15.7	9.0	29.0	--	--	--	--	--	--	--	--	--	
3704	0009	3	6	OV/CP	TTHUP	ND	1	L	?	S		13.3	10.5	18.8	--	--	--	--	--	--	--	--	--	
3704	0010	3	6	OV/CP	TTHUP	ND	1	L	?	8		--	--	--	14.5	12.5	16.2	--	--	--	--	--	--	
3704	0011	3	6	OV/CP	TTHUP	ND	1	L	?	8		--	--	--	13.7	12.0	17.5	--	--	--	--	--	--	
1908	0005	3	1	OV/CP	TTHUP	ND	1	L	?	4		--	--	--	17.5	10.7	E 30.0	--	--	--	--	--	--	

KEY LOC	BON	F	M	IDENTIFICATION ANM	ELM	DOM	C	S	SX	A	B	C M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
1908	0005	3	6	OV/CP	TTHUP	ND	1	L	?	4		--	--	--	17.5	10.7	E 30.0	--	--	--	--	--	--	
1902	0010	3	6	OV/CP	TTHUP	ND	1	R	?	I		15.1	8.5	20.0	--	--	--	--	--	--	--	--	--	
1321	0012	3	6	OV/CP	TTHUP	ND	1	L	?	4		--	--	--	17.5	--	--	--	--	--	--	--	--	
1321	0014	3	6	OV/CP	TTHUP	ND	1	L	?	6		--	--	--	--	--	--	17.1	9.5	35.6	--	--	--	
1321	0031	3	6	OV/CP	TTHUP	ND	1	L	?	4		15.9	9.7	27.1	--	--	--	--	--	--	--	--	--	
0716	0012	3	6	OV/CP	TTHUP	ND	1	R	?	8		15.4	11.2	20.0	--	--	--	--	--	--	--	--	--	
1334	0009	3	6	OV/CP	TTHUP	ND	1	R	?	8		14.6	11.2	28.8	--	--	--	--	--	--	--	--	--	
1331	0011	3	6	OV/CP	TTHUP	ND	1	L	?	J		--	--	--	16.8	E 9.3	32.5	--	--	--	--	--	--	
1332	0002	3	6	OV/CP	TTHUP	ND	1	R	?	A		--	--	--	--	--	--	16.8	11.5	20.0	--	--	--	
1323	0016	3	6	OV/CP	TTHUP	ND	1	L	?	8		13.8	--	17.4	--	--	--	--	--	--	--	--	--	
1323	0017	3	6	OV/CP	TTHUP	ND	1	R	?	S		--	--	--	18.5	--	31.2	--	--	--	--	--	--	
1323	0018	3	6	OV/CP	TTHUP	ND	1	R	?	A		14.4	11.2	17.8	--	--	--	--	--	--	--	--	--	
1323	0015	3	6	OV/CP	TTHUP	ND	1	L	?	J		16.2	10.2	25.5	--	--	--	--	--	--	--	--	--	
0323	0005	3	6	OV/CP	TTHUP	ND	1	R	?	6		15.2	12.2	24.5	--	--	--	--	--	--	--	--	--	
1351	0014	3	6	OV/CP	TTHUP	ND	1	R	?	S		--	--	--	--	--	--	17.5	10.4	E 37.0	--	--	--	
1351	0015	3	6	OV/CP	TTHUP	ND	1	R	?	4		--	--	--	16.4	10.3	32.9	--	--	--	--	--	--	
1342	0006	3	6	OV/CP	TTHUP	ND	1	R	?	8		--	--	--	--	--	--	E 18.4	11.6	E 38.3	--	--	--	
1344	0008	3	6	OV/CP	TTHUP	ND	1	R	?	A		--	--	--	--	--	--	18.9	12.1	E 25.5	--	--	--	
0315	0005	3	6	OV/CP	TTHUP	ND	1	R	?	8		--	--	--	17.3	11.5	28.0	--	--	--	--	--	--	
0320	0002	3	6	OV/CP	TTHUP	ND	1	R	?	A		--	--	--	--	--	--	E 16.0	10.0	28.0	--	--	--	
0320	0001	3	6	OV/CP	TTHUP	ND	1	R	?	8		--	--	--	17.1	11.5	27.5	--	--	--	--	--	--	
1912	0017	3	6	OV/CP	TTHUP	ND	1	R	?	6		--	--	--	--	--	--	15.5	10.5	E 30.0	--	--	--	
0857	0008	3	6	OV/CP	TTHUP	ND	1	L	?	S		--	--	--	17.3	12.7	32.0	--	--	--	--	--	--	
0801	0007	3	6	OV/CP	TTHUP	ND	1	L	?	J		--	--	--	--	--	--	19.3	10.5	E 34.0	--	--	--	
0801	0006	3	6	OV/CP	TTHUP	ND	1	R	?	A		--	--	--	--	--	--	20.9	E 11.0	21.3	--	--	--	
0791	0012	3	6	OV/CP	TTHUP	ND	1	L	?	A		--	--	--	--	--	--	19.1	12.8	22.5	--	--	--	
0758	0004	3	6	OV/CP	TTHUP	ND	1	L	?	4		16.3	10.0	E 28.5	--	--	--	--	--	--	--	--	--	
0846	0003	3	6	OV/CP	TTHUP	ND	1	R	?	I		--	--	--	17.6	9.5	--	--	--	--	--	--	--	
0819	0006	3	6	OV/CP	TTHUP	ND	1	R	?	I		15.7	8.3	--	--	--	--	--	--	--	--	--	--	
0799	0003	3	6	OV/CP	TTHUP	ND	1	R	?	J		--	--	--	16.8	10.5	33.5	--	--	--	--	--	--	
0712	0004	3	6	OV/CP	TTHUP	ND	1	R	?	4		17.5	--	--	--	--	--	--	--	--	--	--	--	
1922	0006	3	6	OV/CP	TTHUP	ND	1	R	?	A		--	--	--	--	--	--	E 19.5	12.9	21.0	--	--	--	
1918	0073	3	1	OV/CP	TTHUP	ND	1	L	?	6		--	--	--	--	--	--	--	10.1	37.0	--	--	--	
1918	0073	3	6	OV/CP	TTHUP	ND	1	L	?	6		--	--	--	--	--	--	--	10.1	37.0	--	--	--	
1918	0069	3	1	OV/CP	TTHUP	ND	1	L	?	S		--	--	--	16.8	11.0	29.0	--	--	--	--	--	--	
1918	0069	3	6	OV/CP	TTHUP	ND	1	L	?	S		--	--	--	16.8	11.0	29.0	--	--	--	--	--	--	
1918	0070	3	1	OV/CP	TTHUP	ND	1	L	?	A		--	--	--	15.5	13.1	16.0	--	--	--	--	--	--	
1918	0070	3	6	OV/CP	TTHUP	ND	1	L	?	A		--	--	--	15.5	13.1	16.0	--	--	--	--	--	--	
1918	0067	3	6	OV/CP	TTHUP	ND	1	R	?	6		--	--	--	--	--	--	18.5	11.9	31.5	--	--	--	
1918	0068	3	1	OV/CP	TTHUP	ND	1	R	?	A		--	--	--	--	--	18.0	--	--	--	--	--	--	
1918	0068	3	6	OV/CP	TTHUP	ND	1	R	?	A		--	--	--	--	--	18.0	--	--	--	--	--	--	
1916	0031	3	6	OV/CP	TTHUP	ND	1	R	?	I		15.8	8.9	E 26.0	--	--	--	--	--	--	--	--	--	
1916	0032	3	6	OV/CP	TTHUP	ND	1	R	?	6		--	--	--	--	--	--	18.6	12.3	E 33.0	--	--	--	
1916	0033	3	6	OV/CP	TTHUP	ND	1	R	?	6		--	--	--	--	--	--	16.6	10.9	E 32.5	--	--	--	
1916	0034	3	6	OV/CP	TTHUP	ND	1	L	?	A		--	--	--	--	--	--	19.0	11.5	27.0	--	--	--	
1915	0122	3	6	OV/CP	TTHUP	ND	1	L	?	8		--	--	--	--	--	--	E 19.0	12.3	24.0	--	--	--	
1915	0123	3	6	OV/CP	TTHUP	ND	1	L	?	J		--	--	--	--	--	--	18.4	11.0	36.0	--	--	--	
1915	0124	3	6	OV/CP	TTHUP	ND	1	L	?	4		--	--	--	18.5	--	32.5	--	--	--	--	--	--	
1915	0126	3	6	OV/CP	TTHUP	ND	1	L	?	J		E 14.3	--	23.5	--	--	--	--	--	--	--	--	--	
1915	0116	3	6	OV/CP	TTHUP	ND	1	R	?	J		15.3	10.9	22.5	--	--	--	--	--	--	--	--	--	
1915	0117	3	6	OV/CP	TTHUP	ND	1	R	?	J		14.7	10.8	22.5	--	--	--	--	--	--	--	--	--	
1915	0119	3	6	OV/CP	TTHUP	ND	1	R	?	8		--	--	--	17.3	16.5	21.0	--	--	--	--	--	--	
1915	0120	3	6	OV/CP	TTHUP	ND	1	R	?	S		--	--	--	--	--	--	21.0	13.2	27.0	--	--	--	
1915	0115	3	6	OV/CP	TTHUP	ND	1	R	?	6		12.0	12.0	9.5	--	--	--	--	--	--	--	--	--	
0856	0005	3	6	OV/CP	TTHUP	ND	1	L	?	A		--	--	--	--	--	--	18.3	11.0	16.3	--	--	--	
0849	0010	3	6	OV/CP	TTHUP	ND	1	L	?	4		--	--	--	17.3	9.3	E 35.0	--	--	--	--	--	--	
0745	0046	3	6	OV/CP	TTHUP	ND	1	R	?	A		14.7	E 12.7	11.0	--	--	--	--	--	--	--	--	--	
0745	0037	3	6	OV/CP	TTHUP	ND	1	R	?	6		--	--	--	15.8	10.6	32.5	--	--	--	--	--	--	
0729	0025	3	6	OV/CP	TTHUP	ND	1	R	?	A		--	--	--	--	--	--	20.6	--	25.5	--	--	--	
0731	0018	3	6	OV/CP	TTHUP	ND	1	L	?	J		--	--	--	17.0	10.5	35.0	--	--	--	--	--	--	
0729	0023	3	6	OV/CP	TTHUP	ND	1	R	?	J		--	--	--	E 19.0	--	35.0	--	--	--	--	--	--	
0729	0024	3	6	OV/CP	TTHUP	ND	1	R	?	4		--	--	--	17.1	11.6	30.5	--	--	--	--	--	--	
0724	0010	3	6	OV/CP	TTHUP	ND	1	L	?	6		17.1	12.0	24.5	--	--	--	--	--	--	--	--	--	
0709	0018	3	6	OV/CP	TTHUP	ND	1	L	?	4		13.8	10.0	20.0	--	--	--	--	--	--	--	--	--	
0709	0020	3	6	OV/CP	TTHUP	ND	1	L	?	4		14.4	E 10.0	25.0	--	--	--	--	--	--	--	--	--	
0843	0004	3	6	OV/CP	TTHUP	ND	1	L	?	I		16.7	9.3	E 30.0	--	--	--	--	--	--	--	--	--	
0704	0004	3	6	OV/CP	TTHUP	ND	1	L	?	6		--	--	--	--	--	--	19.0	E 10.5	32.0	--	--	--	
1914	0016	3	6	OV/CP	TTHUP	ND	1	L	?	8		--	--	--	--	--	--	19.7	12.8	28.5	--	--	--	
1923	0047	3	6	OV/CP	TTHUP	ND	1	R	?	?		15.4	E 11.5	20.0	--	--	--	--	--	--	--	--	--	
1923	0048	3	6	OV/CP	TTHUP	ND	1	R	?	?		--	--	--	17.1	11.5	31.0	--	--	--	--	--	--	
1932	0067	3	6	OV/CP	TTHUP	ND	1	L	?	6		--	--	--	--	--	--	18.3	E 12.5	32.5	--	--	--	
1932	0067	3	6	OV/CP	TTHUP	ND	1	L	?	6		--	--	--	--	--	--	18.3	E 12.5	32.5	--	--	--	
1932	0068	3	6	OV/CP	TTHUP	ND	1	R	?	6		--	--	--	17.0	11.1	E 30.0	--	--	--	--	--	--	
1930	0023	3	6	OV/CP	TTHUP	ND	1	R	?	6		--	--	--	18.0	11.5	30.0	--	--	--	--	--	--	
1930	0025	3	6	OV/CP	TTHUP	ND	1	L	?	A		--	--	--	--	--	--	21.0	--	26.0	--	--	--	
1930	0026	3	6	OV/CP	TTHUP	ND	1	L	?	4		16.2	10.5	25.5	--	--	--	--	--	--	--	--	--	
1930	0027	3	6	OV/CP	TTHUP	ND	1	L	?	6		14.3	11.0	18.5	--	--	--	--	--	--	--	--	--	
1930	0018	3	6	OV/CP	TTHUP	ND	1	R	?	4		16.2	10.2	27.0	--	--	--	--	--	--	--	--	--	
1930	0019	3	6	OV/CP	TTHUP	ND	1	R	?	6		14.2	10.6	18.2	--	--	--	--	--	--	--	--	--	
1930	0022	3	6	OV/CP	TTHUP	ND	1	R	?	J		--	--	--	16.4	10.9	32.5	--	--	--	--	--	--	
1925	0021	3	6	OV/CP	TTHUP	ND	1	L	?	8		14.5	10.7	18.3	--	--	--	--	--	--	--	--	--	
1925	0023	3	6	OV/CP	TTHUP	ND	1	L	?	S		--	--	--	17.8	12.8	28.3	--	--	--	--	--	--	
1925	0024	3	6	OV/CP	TTHUP	ND	1	L	?	S		--	--	--	--	--	--	19.3	E 11.5	E 35.0	--	--	--	
0854	0013	3	6	OV/CP	TTHUP	ND	1	L	?	Y		14.9	10.3	23.2	--	--	--	--	--	--	--	--	--	
0806	0007	3	6	OV/CP	TTHUP	ND	1	L	?	?		17.1	10.7	E 25.0	--	--	--	--	--	--	--	--	--	
0803	0004	3	6	OV/CP	TTHUP	ND	1	L	?	6		--	--	--	--	--	--	15.6	9.7	E 33.0	--	--	--	
0803	0005	3	6	OV/CP	TTHUP	ND	1	L	?	8		--	--	--	--	--	--	E 17.9	11.0	30.0	--	--	--	
0785	0025	3	6	OV/CP	TTHUP	ND	1	R	?	Y		17.2	10.2	--	--	--	--	--	--	--	--	--	--	
0785	0026	3	6	OV/CP	TTHUP	ND	1	L	?	J		--	--	--	--	--	--	E 17.5	8.5	--	--	--	--	
0171	0044	3	6	OV/CP	TTHUP	ND	1	R	?	A		--	--	--	--	--	--	18.4	12.0	27.5	--	--	--	
0171	0048	3	6	OV/CP	TTHUP	ND	1	L	?	A		--	--	--	11.6	12.5	9.5	--	--	--	--	--	--	
0159	0236	3	6	OV/CP	TTHUP	ND	1	R	?	S		--	--	--	15.6	11.2	28.9	--	--	--	--	--	--	
0159	0242	3	6	OV/CP	TTHUP	ND	1	R	?	J		--	--	--	19.5	12.1	33.0	--	--	--	--	--	--	
0159	0250	3	6	OV/CP	TTHUP	ND	1	L	?	4		15.8	8.2	--	--	--	--	--	--	--	--	--	--	
0159	0180	3	6	OV/CP	TTHUP	ND	1	R	?	A		--	--	--	14.1	11.7	21.7	--	--	--	--	--	--	
0159	0190	3	6	OV/CP	TTHUP	ND	1	R	?	J		--	--	--	16.7	10.2	E 28.7	--	--	--	--	--	--	
0159	0170	3	6	OV/CP	TTHUP	ND	1	L	?	A		--	--	--	--	--	--	19.5	12.3	18.7	--	--	--	
0159	0176	3	6	OV/CP	TTHUP	ND	1	R	?	S		--	--	--	--	--	--	E 18.7	--	--	--	--	--	
0159	0177	3	6	OV/CP	TTHUP	ND	1	L	?	6		14.0	--	--	--	--	--	--	--	--	--	--	--	
0159	0178	3	6	OV/CP	TTHUP	ND	1	L	?	6		13.8	10.5	--	--	--	--	--	--	--	--	--	--	

KEY IDENTIFICATION CHARAC. MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

LOC	BON	F	M	ANM	ELM	DOM	C	S	SX	A	B	C M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
1933	0043	3	6	OV/CP	TTHUP	ND	1	L	?	?		16.7	E 10.7	23.5	--	--	--	--	--	--	--	--	--	
1933	0044	3	6	OV/CP	TTHUP	ND	1	L	?	?		--	--	--	16.8	12.8	25.0	--	--	--	--	--	--	
0822	0010	3	6	OV/CP	TTHUP	ND	1	L	?	J		--	--	--	18.4	11.6	34.5	--	--	--	--	--	--	
0737	0006	3	1	OV/CP	TTHUP	ND	1	L	?	8		--	--	--	--	--	--	17.8	10.7	28.5	--	--	--	
0174	0005	3	6	OV/CP	TTHUP	ND	1	L	?	A		--	--	--	--	--	--	18.5	11.1	29.5	--	--	--	
0174	0006	3	6	OV/CP	TTHUP	ND	1	L	?	A		--	--	--	--	--	--	20.5	12.4	15.5	--	--	--	
0174	0007	3	6	OV/CP	TTHUP	ND	1	R	?	Y		15.8	11.9	28.0	--	--	--	--	--	--	--	--	--	
0173	0010	3	6	OV/CP	TTHUP	ND	1	R	?	8		13.4	10.5	17.2	--	--	--	--	--	--	--	--	--	
0165	0040	3	6	OV/CP	TTHUP	ND	1	R	?	8		--	--	--	16.1	11.7	29.8	--	--	--	--	--	--	
0165	0042	3	6	OV/CP	TTHUP	ND	1	R	?	8		13.1	10.5	19.3	--	--	--	--	--	--	--	--	--	
0164	0009	3	6	OV/CP	TTHUP	ND	1	L	?	8		--	--	--	15.7	12.2	22.7	--	--	--	--	--	--	
0161	0022	3	6	OV/CP	TTHUP	ND	1	L	?	8		--	--	--	17.6	11.8	27.3	--	--	--	--	--	--	
0161	0023	3	6	OV/CP	TTHUP	ND	1	L	?	6		15.0	10.5	24.2	--	--	--	--	--	--	--	--	--	
0161	0024	3	6	OV/CP	TTHUP	ND	1	L	?	A		--	--	--	--	--	--	20.6	13.7	17.4	--	--	--	
0163	0004	3	6	OV/CP	TTHUP	ND	1	R	?	S		--	--	--	--	--	--	17.5	10.3	E 32.5	--	--	--	
0161	0018	3	6	OV/CP	TTHUP	ND	1	R	?	A		--	--	--	15.6	11.3	21.0	--	--	--	--	--	--	
0161	0019	3	6	OV/CP	TTHUP	ND	1	L	?	8		15.9	10.6	24.8	--	--	--	--	--	--	--	--	--	
0161	0020	3	6	OV/CP	TTHUP	ND	1	L	?	8		13.8	11.1	18.7	--	--	--	--	--	--	--	--	--	
0161	0021	3	6	OV/CP	TTHUP	ND	1	L	?	8		--	--	--	17.3	12.2	31.2	--	--	--	--	--	--	
0161	0017	3	6	OV/CP	TTHUP	ND	1	R	?	8		--	--	--	16.5	10.6	28.6	--	--	--	--	--	--	
1939	0021	3	6	OV/CP	TTHUP	ND	1	L	?	6		16.4	10.5	E 23.0	--	--	--	--	--	--	--	--	--	
1937	0047	3	6	OV/CP	TTHUP	ND	1	R	?	8		--	--	--	--	--	--	21.3	13.4	35.5	--	--	--	
1939	0019	3	6	OV/CP	TTHUP	ND	1	L	?	4		15.7	8.8	--	--	--	--	--	--	--	--	--	--	
1939	0020	3	6	OV/CP	TTHUP	ND	1	L	?	S		--	--	--	--	--	--	17.0	10.9	30.0	--	--	--	
1937	0044	3	6	OV/CP	TTHUP	ND	1	L	?	J		[illegible]	9.8	E 23.0	--	--	--	--	--	--	--	--	--	
1937	0046	3	6	OV/CP	TTHUP	ND	1	L	?	6		15.0	--	22.0	--	--	--	--	--	--	--	--	--	
1936	0028	3	6	OV/CP	TTHUP	ND	1	R	?	A		--	--	--	15.2	13.2	13.5	--	--	--	--	--	--	
2301	0008	3	6	OV/CP	TTHUP	ND	1	L	?	6		--	--	--	17.0	11.8	--	--	--	--	--	--	--	
2301	0009	3	6	OV/CP	TTHUP	ND	1	R	?	Y		13.8	9.7	21.0	--	--	--	--	--	--	--	--	--	
0215	0050	3	6	OV/CP	TTHUP	ND	1	L	?	S		--	--	--	--	--	--	17.1	10.2	30.4	--	--	--	
0215	0051	3	6	OV/CP	TTHUP	ND	1	L	?	6		--	--	--	--	--	--	16.5	9.7	35.3	--	--	--	
0215	0052	3	6	OV/CP	TTHUP	ND	1	R	?	J		15.8	10.1	27.9	--	--	--	--	--	--	--	--	--	
0215	0053	3	6	OV/CP	TTHUP	ND	1	R	?	4		15.0	8.6	--	--	--	--	--	--	--	--	--	--	
0215	0048	3	6	OV/CP	TTHUP	ND	1	L	?	I		15.3	8.7	--	--	--	--	--	--	--	--	--	--	
0215	0049	3	6	OV/CP	TTHUP	ND	1	L	?	J		--	--	--	16.6	--	33.5	--	--	--	--	--	--	
0212	0008	3	6	OV/CP	TTHUP	ND	1	L	?	A		--	--	--	E 15.5	12.0	20.0	--	--	--	--	--	--	
0206	0045	3	6	OV/CP	TTHUP	ND	1	R	?	J		--	--	--	16.9	E 10.5	27.3	--	--	--	--	--	--	
0211	0001	3	6	OV/CP	TTHUP	ND	1	R	?	8		--	--	--	--	--	--	19.0	11.4	31.5	--	--	--	
0206	0043	3	6	OV/CP	TTHUP	ND	1	L	?	S		--	--	--	--	--	--	17.5	10.5	37.0	--	--	--	
0197	0029	3	6	OV/CP	TTHUP	ND	1	L	?	6		--	--	--	16.3	10.9	28.8	--	--	--	--	--	--	
0182	0008	3	6	OV/CP	TTHUP	ND	1	R	?	6		15.3	11.8	26.8	--	--	--	--	--	--	--	--	--	
0765	0015	3	6	OV/CP	TTHUP	ND	1	R	?	A		--	--	--	--	--	--	21.3	13.5	20.8	--	--	--	
2303	0009	3	6	OV/CP	TTHUP	ND	1	R	?	6		15.6	E 9.7	25.0	--	--	--	--	--	--	--	--	--	
2102	0006	3	6	OV/CP	TTHUP	ND	1	R	?	6		--	--	--	--	--	--	17.0	--	--	--	--	--	
0214	0016	3	6	OV/CP	TTHUP	ND	1	R	?	J		--	--	--	17.5	10.5	32.5	--	--	--	--	--	--	
0214	0017	3	6	OV/CP	TTHUP	ND	1	R	?	I		15.6	9.2	24.8	--	--	--	--	--	--	--	--	--	
0214	0013	3	6	OV/CP	TTHUP	ND	1	R	?	6		--	--	--	--	--	--	17.6	10.9	32.5	--	--	--	
0203	0014	3	6	OV/CP	TTHUP	ND	1	R	?	4		15.4	9.9	24.0	--	--	--	--	--	--	--	--	--	
0199	0027	3	6	OV/CP	TTHUP	ND	1	R	?	S		--	--	--	--	--	--	18.4	11.0	E 35.6	--	--	--	
0203	0013	3	6	OV/CP	TTHUP	ND	1	R	?	4		--	--	--	16.2	9.2	--	--	--	--	--	--	--	
0199	0023	3	6	OV/CP	TTHUP	ND	1	L	?	8		--	--	--	--	--	--	19.5	11.5	35.4	--	--	--	
0199	0024	3	6	OV/CP	TTHUP	ND	1	L	?	6		15.4	10.5	28.0	--	--	--	--	--	--	--	--	--	
0199	0025	3	6	OV/CP	TTHUP	ND	1	L	?	8		13.9	12.3	18.5	--	--	--	--	--	--	--	--	--	
0198	0002	3	6	OV/CP	TTHUP	ND	1	L	?	J		14.7	9.7	23.5	--	--	--	--	--	--	--	--	--	
0198	0004	3	6	OV/CP	TTHUP	ND	1	L	?	4		15.5	10.2	26.4	--	--	--	--	--	--	--	--	--	
0193	0005	3	6	OV/CP	TTHUP	ND	1	R	?	S		--	--	--	--	--	--	17.3	10.6	E 33.5	--	--	--	
0196	0020	3	6	OV/CP	TTHUP	ND	1	L	?	6		14.9	10.3	24.0	--	--	--	--	--	--	--	--	--	
0187	0003	3	1	OV/CP	TTHUP	ND	1	L	?	J		--	--	--	17.2	10.1	E 30.6	--	--	--	--	--	--	
0191	0009	3	6	OV/CP	TTHUP	ND	1	R	?	J		--	--	--	17.2	9.6	32.8	--	--	--	--	--	--	
0191	0010	3	6	OV/CP	TTHUP	ND	1	R	?	J		15.7	10.2	25.0	--	--	--	--	--	--	--	--	--	
2111	0032	3	6	OV/CP	TTHUP	ND	1	L	?	4		--	--	--	17.7	10.1	25.6	--	--	--	--	--	--	
2111	0033	3	6	OV/CP	TTHUP	ND	1	R	?	4		--	--	--	17.2	10.1	26.8	--	--	--	--	--	--	
2108	0064	3	6	OV/CP	TTHUP	ND	1	L	?	J		--	--	--	--	--	--	17.3	9.8	--	--	--	--	
2108	0062	3	6	OV/CP	TTHUP	ND	1	R	?	J		E 16.0	9.2	E 27.8	--	--	--	--	--	--	--	--	--	
2108	0063	3	6	OV/CP	TTHUP	ND	1	L	?	8		--	--	--	16.9	11.1	30.3	--	--	--	--	--	--	
2309	0030	3	6	OV/CP	TTHUP	ND	1	R	?	S		--	--	--	--	--	--	19.0	12.5	32.5	--	--	--	
2309	0033	3	6	OV/CP	TTHUP	ND	1	L	?	6		15.1	11.4	17.0	--	--	--	--	--	--	--	--	--	
2308	0033	3	6	OV/CP	TTHUP	ND	1	L	?	J		14.4	10.4	22.5	--	--	--	--	--	--	--	--	--	
2309	0027	3	6	OV/CP	TTHUP	ND	1	R	?	6	4	14.0	9.3	E 26.0	--	--	--	--	--	--	--	--	--	
2309	0028	3	6	OV/CP	TTHUP	ND	1	R	?	8	4	--	--	--	--	--	--	17.5	10.8	28.0	--	--	--	
2309	0029	3	6	OV/CP	TTHUP	ND	1	L	?	8		--	--	--	--	--	--	17.8	10.8	19.0	--	--	--	
2307	0019	3	6	OV/CP	TTHUP	ND	1	R	?	S		--	--	--	16.8	11.0	27.0	--	--	--	--	--	--	
2308	0032	3	6	OV/CP	TTHUP	ND	1	R	?	J		--	--	--	18.6	11.0	E 32.5	--	--	--	--	--	--	
2307	0010	3	6	OV/CP	TTHUP	ND	1	L	?	J		--	--	--	--	--	--	17.2	10.0	E 33.0	--	--	--	
2307	0018	3	6	OV/CP	TTHUP	ND	1	R	?	S		15.0	10.5	17.0	--	--	--	--	--	--	--	--	--	
2112	0018	3	6	OV/CP	TTHUP	ND	1	L	?	4		--	--	--	17.0	E 10.0	--	--	--	--	--	--	--	
2112	0017	3	6	OV/CP	TTHUP	ND	1	L	?	4		15.3	9.5	28.7	--	--	--	--	--	--	--	--	--	
1942	0024	3	6	OV/CP	TTHUP	ND	1	L	?	S		--	--	--	18.1	13.5	31.5	--	--	--	--	--	--	
1942	0025	3	6	OV/CP	TTHUP	ND	1	R	?	Y		16.9	10.3	--	--	--	--	--	--	--	--	--	--	
2115	0007	3	6	OV/CP	TTHUP	ND	1	R	?	S		--	--	--	17.3	10.7	27.6	--	--	--	--	--	--	
2115	0008	3	6	OV/CP	TTHUP	ND	1	R	?	6		16.4	10.1	27.3	--	--	--	--	--	--	--	--	--	
2115	0006	3	6	OV/CP	TTHUP	ND	1	L	?	S		--	--	--	--	--	--	E 18.0	10.3	35.3	--	--	--	
0876	0008	3	6	OV/CP	TTHUP	ND	1	R	?	I		16.1	9.7	25.0	--	--	--	--	--	--	--	--	--	
0880	0005	3	6	OV/CP	TTHUP	ND	1	R	?	6		--	--	--	--	--	--	E 17.0	E 11.5	36.0	--	--	--	
0880	0006	3	6	OV/CP	TTHUP	ND	1	R	?	J		--	--	--	E 19.0	E 11.0	32.5	--	--	--	--	--	--	
0880	0007	3	6	OV/CP	TTHUP	ND	1	L	?	J		16.3	10.5	25.5	--	--	--	--	--	--	--	--	--	
0836	0002	3	6	OV/CP	TTHUP	ND	1	R	?	4		16.2	E 8.9	26.0	--	--	--	--	--	--	--	--	--	
0813	0004	3	6	OV/CP	TTHUP	ND	1	R	?	?		16.7	E 10.0	28.0	--	--	--	--	--	--	--	--	--	
0813	0009	3	6	OV/CP	TTHUP	ND	1	L	?	4		--	--	--	17.5	10.0	E 34.0	--	--	--	--	--	--	
2129	0005	3	6	OV/CP	TTHUP	ND	1	R	?	8		--	--	--	18.0	11.9	31.1	--	--	--	--	--	--	
2128	0009	3	6	OV/CP	TTHUP	ND	1	R	?	J		--	--	--	17.9	E 10.7	E 27.4	--	--	--	--	--	--	
2110	0010	3	6	OV/CP	TTHUP	ND	1	L	?	S		--	--	--	17.0	11.2	29.5	--	--	--	--	--	--	
0867	0006	3	6	OV/CP	TTHUP	ND	1	L	?	A		--	--	--	--	--	--	18.6	11.9	17.0	--	--	--	
0827	0008	3	6	OV/CP	TTHUP	ND	1	L	?	J		14.5	10.7	18.0	--	--	--	--	--	--	--	--	--	
0817	0007	3	6	OV/CP	TTHUP	ND	1	R	?	6		--	--	--	--	--	--	16.8	10.5	32.5	--	--	--	
0180	0007	3	6	OV/CP	TTHUP	ND	1	R	?	6		16.1	11.0	23.0	--	--	--	--	--	--	--	--	--	
0180	0010	3	6	OV/CP	TTHUP	ND	1	L	?	8		15.0	11.0	21.5	--	--	--	--	--	--	--	--	--	
0325	0014	3	6	OV/CP	TTHLW	ND	1	R	?	J		--	--	--	15.4	7.3	27.0	--	--	--	--	--	--	
0534	0006	3	6	OV/CP	TTHLW	ND	1	R	?	I		15.8	6.9	28.0	--	--	--	--	--	--	--	--	--	
0399	0009	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	16.5	7.2	32.2	--	--	--	--	--	--	

ll

KEY IDENTIFICATION CHARAC. MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

LOC	BON	F	M	ANM	ELM	DOH	C	S	SX	A	B	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	COMMENT
0278	0002	3	6	OV/CP	TTHLW	ND	1	R	?	4		--	--	--	18.9	7.1	E 37.3	--	--	--	--	--	--	
0293	0002	3	6	OV/CP	TTHLW	ND	1	R	?	6		--	--	--	15.5	8.0	30.8	--	--	--	--	--	--	
3767	0007	3	6	OV/CP	TTHLW	ND	1	L	?	S		--	--	--	--	--	19.3	E 23.0	8.4	28.5	--	--	--	
3715	0009	3	6	OV/CP	TTHLW	ND	1	L	?	8		12.7	7.6	11.5	--	--	--	--	--	--	--	--	--	
3715	0007	3	6	OV/CP	TTHLW	ND	1	R	?	?		E 14.0	7.8	E 24.0	--	--	--	--	--	--	--	--	--	
0466	0001	3	6	OV/CP	TTHLW	ND	1	L	?	S		--	--	--	--	--	--	20.7	E 7.4	E 32.0	--	--	--	
3766	0043	3	6	OV/CP	TTHLW	ND	1	L	?	S		--	--	--	--	--	--	22.6	E 7.5	23.0	4.1	--	--	
3765	0129	3	6	OV/CP	TTHLW	ND	1	R	?	J		--	--	--	15.8	7.8	32.8	--	--	--	--	--	--	
3765	0130	3	6	OV/CP	TTHLW	ND	1	R	?	J		14.7	6.5	24.0	--	--	--	--	--	--	--	--	--	
3764	0007	3	6	OV/CP	TTHLW	ND	1	R	?	A		--	--	--	11.2	7.9	7.0	--	--	--	--	--	--	
3764	0003	3	6	OV/CP	TTHLW	ND	1	R	?	J		--	--	--	15.2	7.9	33.8	--	--	--	--	--	--	
3764	0004	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	14.9	7.2	31.0	--	--	--	--	--	--	
3750	0002	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	17.6	7.9	E 30.0	--	--	--	--	--	--	
3753	0029	3	6	OV/CP	TTHLW	ND	1	L	?	J		12.5	6.7	19.4	--	--	--	--	--	--	--	--	--	
3755	0035	3	6	OV/CP	TTHLW	ND	1	L	?	8		--	--	--	--	--	--	22.7	--	22.0	--	--	--	
3713	0041	3	6	OV/CP	TTHLW	ND	1	R	?	I		16.6	7.1	--	--	--	--	--	--	--	--	--	--	
3711	0007	3	6	OV/CP	TTHLW	ND	1	L	?	A		--	--	--	12.8	8.0	15.0	--	--	--	--	--	--	
3711	0010	3	6	OV/CP	TTHLW	ND	1	R	?	A		--	--	--	11.5	8.5	7.5	--	--	--	--	--	--	
0736	0011	3	6	OV/CP	TTHLW	ND	1	L	?	S		--	--	--	--	--	--	23.1	8.0	34.0	5.0	--	--	
0726	0015	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	17.3	7.8	31.0	--	--	--	--	--	--	
1905	0019	3	6	OV/CP	TTHLW	ND	1	R	?	J		--	--	--	--	--	--	23.2	7.8	37.3	--	--	--	
1321	0013	3	6	OV/CP	TTHLW	ND	1	L	?	I		15.1	6.3	--	--	--	--	--	--	--	--	--	--	
1317	0002	3	6	OV/CP	TTHLW	ND	1	L	?	8		--	--	--	14.8	8.3	23.8	--	--	--	--	--	--	
1318	0005	3	6	OV/CP	TTHLW	ND	1	R	?	8		--	--	--	--	--	--	23.4	8.6	31.2	4.8	--	--	
0774	0005	3	6	OV/CP	TTHLW	ND	1	R	?	8		12.7	8.0	13.9	--	--	--	--	--	--	--	--	--	
0716	0016	3	6	OV/CP	TTHLW	ND	1	L	?	S		14.0	7.4	21.0	--	--	--	--	--	--	--	--	--	
1339	0005	3	6	OV/CP	TTHLW	ND	1	R	?	8		--	--	--	--	--	--	22.8	7.9	E 36.8	4.7	--	--	
1333	0009	3	6	OV/CP	TTHLW	ND	1	L	?	8		--	--	--	--	--	--	24.2	8.0	E 20.0	5.5	--	--	
1334	0005	3	6	OV/CP	TTHLW	ND	1	L	?	A		--	--	--	12.2	8.6	8.4	--	--	--	--	--	--	
1327	0004	3	6	OV/CP	TTHLW	ND	1	R	?	8		--	--	--	14.6	8.4	17.5	--	--	--	--	--	--	
0323	0008	3	6	OV/CP	TTHLW	ND	1	R	?	J		--	--	--	--	--	--	--	7.5	E 35.0	E 6.0	--	--	
0323	0006	3	6	OV/CP	TTHLW	ND	1	R	?	8		--	--	--	14.0	7.6	E 30.0	--	--	--	--	--	--	
0323	0007	3	6	OV/CP	TTHLW	ND	1	R	?	8		--	--	--	--	--	--	22.9	8.1	30.0	5.3	--	--	
1352	0002	3	6	OV/CP	TTHLW	ND	1	R	?	8		--	--	--	--	--	--	E 20.0	7.9	24.6	5.2	--	--	
1361	0003	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	18.3	8.3	37.8	--	--	--	--	--	--	
1348	0020	3	6	OV/CP	TTHLW	ND	1	R	?	4		--	--	--	18.2	7.3	35.2	--	--	--	--	--	--	
1351	0017	3	6	OV/CP	TTHLW	ND	1	R	?	A		--	--	--	--	--	--	23.5	9.3	E 20.0	6.0	--	--	
0317	0008	3	6	OV/CP	TTHLW	ND	1	R	?	8		--	--	--	--	--	--	--	9.0	28.5	--	--	--	
0317	0011	3	6	OV/CP	TTHLW	ND	1	R	?	4		--	--	--	16.7	7.0	E 29.0	--	--	--	--	--	--	
0315	0004	3	6	OV/CP	TTHLW	ND	1	R	?	6		--	--	--	16.8	7.5	25.0	--	--	--	--	--	--	
0320	0014	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	E 15.5	7.2	E 30.0	--	--	--	--	--	--	
1912	0018	3	6	OV/CP	TTHLW	ND	1	L	?	S		--	--	--	13.3	6.8	E 25.0	--	--	--	--	--	--	
1370	0003	3	6	OV/CP	TTHLW	ND	1	L	?	A		--	--	--	--	--	--	21.8	8.5	7.5	--	--	--	
0755	0012	3	6	OV/CP	TTHLW	ND	1	L	?	6		--	--	--	--	--	--	E 22.5	7.8	E 32.5	4.3	--	--	
0322	0005	3	6	OV/CP	TTHLW	ND	1	R	?	A		--	--	--	--	--	--	E 24.5	9.8	22.0	7.5	--	--	
0776	0004	3	6	OV/CP	TTHLW	ND	1	L	?	6		--	--	--	--	--	--	E 22.0	8.6	34.0	5.8	--	--	
0722	0010	3	6	OV/CP	TTHLW	ND	1	L	?	6		--	--	--	16.1	8.3	25.0	--	--	--	--	--	--	
1928	0002	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	18.6	8.5	36.2	--	--	--	--	--	--	
1918	0085	3	1	OV/CP	TTHLW	ND	1	L	?	?		--	--	18.1	--	--	--	--	--	--	--	--	--	
1918	0085	3	6	OV/CP	TTHLW	ND	1	L	?	?		--	--	18.1	--	--	--	--	--	--	--	--	--	
1918	0082	3	1	OV/CP	TTHLW	ND	1	L	?	A		--	--	--	--	--	--	--	E 8.0	10.0	--	--	--	
1918	0082	3	6	OV/CP	TTHLW	ND	1	L	?	A		--	--	--	--	--	--	--	E 8.0	10.0	--	--	--	
1918	0083	3	1	OV/CP	TTHLW	ND	1	L	?	6		12.3	7.3	12.4	--	--	--	--	--	--	--	--	--	
1918	0083	3	6	OV/CP	TTHLW	ND	1	L	?	6		12.3	7.3	12.4	--	--	--	--	--	--	--	--	--	
1918	0079	3	1	OV/CP	TTHLW	ND	1	R	?	A		8.8	6.4	7.5	--	--	--	--	--	--	--	--	--	
1918	0079	3	6	OV/CP	TTHLW	ND	1	R	?	A		8.8	6.4	7.5	--	--	--	--	--	--	--	--	--	
1918	0080	3	1	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	18.5	7.8	31.0	--	--	--	--	--	--	
1918	0080	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	18.5	7.8	31.0	--	--	--	--	--	--	
1918	0075	3	1	OV/CP	TTHLW	ND	1	R	?	6		13.3	7.8	13.0	--	--	--	--	--	--	--	--	--	
1918	0075	3	6	OV/CP	TTHLW	ND	1	R	?	6		13.3	7.8	13.0	--	--	--	--	--	--	--	--	--	
1918	0077	3	1	OV/CP	TTHLW	ND	1	R	?	8		--	--	--	--	--	--	--	8.3	32.5	--	--	--	
1918	0077	3	6	OV/CP	TTHLW	ND	1	R	?	8		--	--	--	--	--	--	--	8.3	32.5	6.3	--	--	
1918	0074	3	1	OV/CP	TTHLW	ND	1	R	?	I		16.5	7.2	24.7	--	--	--	--	--	--	--	--	--	
1918	0074	3	6	OV/CP	TTHLW	ND	1	R	?	I		16.5	7.2	24.7	--	--	--	--	--	--	--	--	--	
1917	0003	3	6	OV/CP	TTHLW	ND	1	R	?	S		--	--	--	14.5	7.9	25.0	--	--	--	--	--	--	
1916	0035	3	6	OV/CP	TTHLW	ND	1	L	?	6		--	--	--	--	--	--	20.8	7.0	E 34.5	4.4	--	--	
1916	0036	3	6	OV/CP	TTHLW	ND	1	L	?	6		--	--	--	--	--	--	25.5	8.1	39.5	--	--	--	
1916	0038	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	17.9	7.8	34.0	--	--	--	--	--	--	
1916	0039	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	17.9	7.2	36.0	--	--	--	--	--	--	
1915	0105	3	6	OV/CP	TTHLW	ND	1	L	?	8		11.1	6.7	8.5	--	--	--	--	--	--	--	--	--	
1915	0103	3	6	OV/CP	TTHLW	ND	1	L	?	6		13.5	7.0	22.2	--	--	--	--	--	--	--	--	--	
1915	0104	3	6	OV/CP	TTHLW	ND	1	L	?	J		13.6	7.1	20.0	--	--	--	--	--	--	--	--	--	
1915	0099	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	18.2	7.9	--	--	--	--	--	--	--	
1915	0100	3	6	OV/CP	TTHLW	ND	1	L	?	8		--	--	--	14.5	8.1	17.0	--	--	--	--	--	--	
1915	0101	3	6	OV/CP	TTHLW	ND	1	L	?	8		--	--	--	E 14.0	8.1	19.5	--	--	--	--	--	--	
1915	0102	3	6	OV/CP	TTHLW	ND	1	L	?	S		12.7	8.2	12.5	--	--	--	--	--	--	--	--	--	
1915	0095	3	6	OV/CP	TTHLW	ND	1	L	?	8		--	--	--	--	--	--	E 20.5	8.2	27.5	6.0	--	--	
1915	0096	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	16.8	7.3	35.5	--	--	--	--	--	--	
1915	0097	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	17.5	7.6	32.5	--	--	--	--	--	--	
1915	0098	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	17.0	7.7	E 30.0	--	--	--	--	--	--	
1915	0090	3	6	OV/CP	TTHLW	ND	1	R	?	A		--	--	--	--	--	--	--	8.5	18.0	--	--	--	
1915	0091	3	6	OV/CP	TTHLW	ND	1	R	?	J		--	--	--	16.5	7.9	29.5	--	--	--	--	--	--	
1915	0093	3	6	OV/CP	TTHLW	ND	1	L	?	S		--	--	--	--	--	--	--	8.0	30.0	5.0	--	--	
1915	0094	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	--	--	--	22.8	7.3	37.5	4.4	--	--	
1915	0089	3	6	OV/CP	TTHLW	ND	1	R	?	A		--	--	--	--	--	--	23.6	8.0	18.0	--	--	--	
0848	0018	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	17.1	7.0	31.5	--	--	--	--	--	--	
0849	0005	3	6	OV/CP	TTHLW	ND	1	R	?	6		--	--	--	--	--	--	26.1	8.9	37.0	5.8	--	--	
0805	0006	3	6	OV/CP	TTHLW	ND	1	L	?	A		--	--	--	--	--	--	E 21.0	8.8	12.0	E 6.5	--	--	
0745	0038	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	--	--	--	E 22.3	7.8	E 32.0	--	--	--	
0745	0042	3	6	OV/CP	TTHLW	ND	1	R	?	4		--	--	--	17.6	6.7	--	--	--	--	--	--	--	
0729	0021	3	6	OV/CP	TTHLW	ND	1	R	?	S		--	--	--	--	--	--	E 22.5	8.5	30.0	--	--	--	
0729	0022	3	6	OV/CP	TTHLW	ND	1	R	?	4		E 15.5	8.0	25.0	--	--	--	--	--	--	--	--	--	
0729	0020	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	16.6	8.0	28.0	--	--	--	--	--	--	
0705	0009	3	6	OV/CP	TTHLW	ND	1	L	?	A		--	--	--	15.9	9.2	21.0	--	--	--	--	--	--	
0705	0010	3	6	OV/CP	TTHLW	ND	1	R	?	S		--	--	--	17.5	8.7	30.5	--	--	--	--	--	--	
0795	0009	3	6	OV/CP	TTHLW	ND	1	R	?	8		--	--	--	13.7	8.0	17.0	--	--	--	--	--	--	
0795	0010	3	6	OV/CP	TTHLW	ND	1	L	?	8		--	--	--	--	--	--	E 22.5	8.5	19.0	5.7	--	--	
0748	0003	3	6	OV/CP	TTHLW	ND	1	L	?	J		E 13.0	7.1	21.0	--	--	--	--	--	--	--	--	--	
1920	0007	3	6	OV/CP	TTHLW	ND	1	R	?	8		11.2	6.9	11.0	--	--	--	--	--	--	--	--	--	
1914	0017	3	6	OV/CP	TTHLW	ND	1	L	?	8		--	--	--	15.0	8.7	21.0	--	--	--	--	--	--	

KEY / IDENTIFICATION / CHARAC. / MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

LOC	BON	F	M	ANM	ELM	DOM	C	S	SX	A	B	C	M1	C	M2	C	M3	C	M4	C	M5	C	M6	C	M7	C	M8	C	M9	C	M10	C	M11	C	M12	COMMENT
0825	0007	3	6	OV/CP	TTHLW	ND	1	R	?	6			--		--		--		--		--		--		23.0		7.6		26.0		3.9		--		--	
0727	0016	3	6	OV/CP	TTHLW	ND	1	R	?	S			11.4		7.6		11.7		--		--		--		--		--		--		--		--		--	
1923	0051	3	6	OV/CP	TTHLW	ND	1	R	?	J			--		--		--	E	16.5		7.9		29.0		--		--		--		--		--		--	
1923	0049	3	6	OV/CP	TTHLW	ND	1	R	?	J		E	14.5		7.3		21.0		--		--		--		--		--		--		--		--		--	
1923	0050	3	6	OV/CP	TTHLW	ND	1	R	?	J			14.0		7.7		16.3		--		--		--		--		--		--		--		--		--	
1932	0070	3	1	OV/CP	TTHLW	ND	1	R	?	A			--		--		--		13.8		9.1		14.5		--		--		--		--		--		--	
1932	0070	3	6	OV/CP	TTHLW	ND	1	R	?	A			--		--		--		13.8		9.1		14.5		--		--		--		--		--		--	
1932	0069	3	6	OV/CP	TTHLW	ND	1	R	?	I			15.6		6.8		25.0		--		--		--		--		--		--		--		--		--	
1932	0016	3	6	OV/CP	TTHLW	ND	1	R	?	J			--		--		--		--		--		--		25.0		7.6		--	E	4.5		--		--	
1932	0017	3	6	OV/CP	TTHLW	ND	1	R	?	8			--		--		--		--		--		--	E	21.0		8.5		13.5		5.6		--		--	
1930	0009	3	6	OV/CP	TTHLW	ND	1	L	?	J			--		--		--		19.0		7.6		35.5		--		--		--		--		--		--	
1930	0001	3	6	OV/CP	TTHLW	ND	1	R	?	8			--		--		--		--		8.9		19.0		--		--		--		--		--		--	
1930	0002	3	6	OV/CP	TTHLW	ND	1	R	?	J			--		--		--		19.3		7.7	E	30.0		--		--		--		--		--		--	
1930	0007	3	6	OV/CP	TTHLW	ND	1	R	?	6			--		--		--		17.2		8.5		29.5		--		--		--		--		--		--	
0794	0008	3	6	OV/CP	TTHLW	ND	1	R	?	6			--		--		--		--		--		--	E	21.5		8.2		30.0		5.3		--		--	
0779	0007	3	6	OV/CP	TTHLW	ND	1	L	?	J			--		--		--		16.5		7.2		32.0		--		--		--		--		--		--	
0779	0008	3	6	OV/CP	TTHLW	ND	1	R	?	A			--		--		--		--		--		--		23.7		8.3		24.2		5.2		--		--	
0171	0046	3	6	OV/CP	TTHLW	ND	1	L	?	J			--		--		--		16.8		7.8		29.5		--		--		--		--		--		--	
0171	0047	3	6	OV/CP	TTHLW	ND	1	L	?	S			--		--		--		15.6		7.8		--		--		--		--		--		--		--	
0171	0043	3	6	OV/CP	TTHLW	ND	1	R	?	J			--		--		--		--		--		--	E	21.0		7.7		--		6.0		--		--	
0159	0340	3	6	OV/CP	TTHLW	ND	1	R	?	8			--		--		--		--		--		--		23.3		8.0		19.8		5.2		--		--	
0159	0234	3	6	OV/CP	TTHLW	ND	1	L	?	A			--		--		--		--		--		--		20.6		7.9		12.0		6.2		--		--	
0159	0224	3	6	OV/CP	TTHLW	ND	1	R	?	J			--		--		--		17.3		8.0		31.8		--		--		--		--		--		--	
0159	0228	3	6	OV/CP	TTHLW	ND	1	L	?	J			--		--		--		15.5		7.2		27.0		--		--		--		--		--		--	
0159	0232	3	6	OV/CP	TTHLW	ND	1	L	?	8			--		--		--		--		--		--	E	21.0		7.9		22.5		5.0		--		--	
0159	0233	3	6	OV/CP	TTHLW	ND	1	L	?	A			--		--		--		--		--		--		22.5		8.6		15.9		6.3		--		--	
0159	0196	3	6	OV/CP	TTHLW	ND	1	L	?	A			10.7		8.0		7.4		--		--		--		--		--		--		--		--		--	
0159	0198	3	6	OV/CP	TTHLW	ND	1	R	?	A			11.9		7.7		14.0		--		--		--		--		--		--		--		--		--	
0159	0199	3	6	OV/CP	TTHLW	ND	1	R	?	A			10.2		6.7		10.8		--		--		--		--		--		--		--		--		--	
0159	0222	3	6	OV/CP	TTHLW	ND	1	R	?	8			12.0		7.2		16.2		--		--		--		--		--		--		--		--		--	
0159	0191	3	6	OV/CP	TTHLW	ND	1	R	?	J			--		--		--		17.7		7.7		35.8		--		--		--		--		--		--	
0159	0193	3	6	OV/CP	TTHLW	ND	1	L	?	J			--		--		--		16.2		7.8		--		--		--		--		--		--		--	
1933	0045	3	6	OV/CP	TTHLW	ND	1	R	?	A			--		--		--		--		--		--		23.4		8.2		13.5		5.7		--		--	
1931	0028	3	6	OV/CP	TTHLW	ND	1	L	?	4			14.6		6.5		27.5		--		--		--		--		--		--		--		--		--	
0837	0007	3	6	OV/CP	TTHLW	ND	1	R	?	4			16.4		6.5		30.0		--		--		--		--		--		--		--		--		--	
0037	0008	3	6	OV/CP	TTHLW	ND	1	R	?	4		E	16.0	E	6.1	E	27.5		--		--		--		--		--		--		--		--		--	
0732	0015	3	1	OV/CP	TTHLW	ND	1	R	?	6			--		--		--		16.4		7.5		29.0		--		--		--		--		--		--	
0174	0010	3	6	OV/CP	TTHLW	ND	1	L	?	S			--		--		--		14.6		7.5		20.0		--		--		--		--		--		--	
0174	0009	3	6	OV/CP	TTHLW	ND	1	R	?	A			--		--		--		--		--		--		24.5		8.7		15.2		7.2		--		--	
0173	0008	3	6	OV/CP	TTHLW	ND	1	R	?	?			13.3		7.7		21.0		--		--		--		--		--		--		--		--		--	
0172	0006	3	6	OV/CP	TTHLW	ND	1	R	?	8			--		--		--		--		--		--		22.5		8.5		23.0		--		--		--	
0173	0007	3	6	OV/CP	TTHLW	ND	1	L	?	?			16.2		6.8		--		--		--		--		--		--		--		--		--		--	
0165	0038	3	6	OV/CP	TTHLW	ND	1	L	?	6			--		--		--		18.2		7.9	E	34.0		--		--		--		--		--		--	
0164	0011	3	6	OV/CP	TTHLW	ND	1	R	?	S			--		--		--		--		--		--	E	21.5		8.3	E	30.0		5.9		--		--	
0163	0005	3	6	OV/CP	TTHLW	ND	1	L	?	A			--		--		--		--		--		--		24.5		8.8	E	11.5	E	5.5		--		--	
0163	0009	3	6	OV/CP	TTHLW	ND	1	L	?	A			12.5		7.6		12.3		--		--		--		--		--		--		--		--		--	
0161	0007	3	6	OV/CP	TTHLW	ND	1	R	?	S			--		--		--		--		--		--	E	20.5		7.3	E	33.5		4.8		--		--	
0161	0005	3	6	OV/CP	TTHLW	ND	1	L	?	A			--		--		--		--		--		--		23.7		?.0		16.5		6.0		--		--	
1937	0015	3	6	OV/CP	TTHLW	ND	1	R	?	6			--		--		--		--		--		--		23.6		8.4		25.4		5.0		--		--	
1937	0042	3	6	OV/CP	TTHLW	ND	1	R	?	S			--		--		--		--		--		--	E	20.0		7.8		30.0		4.0		--		--	
1937	0043	3	6	OV/CP	TTHLW	ND	1	L	?	S			--		--		--		--		--		--	E	21.0		--	E	30.0		--		--		--	
1936	0025	3	6	OV/CP	TTHLW	ND	1	R	?	J			--		--		--		19.2		8.1	E	30.0		--		--		--		--		--		--	
1935	0018	3	6	OV/CP	TTHLW	ND	1	L	?	A			--		--		--		--		--		--		23.0		8.3		14.0		--		--		--	
0207	0024	3	6	OV/CP	TTHLW	ND	1	L	?	A			--		--		--		--		--		--		22.9		8.2		26.1		5.0		--		--	
0212	0006	3	6	OV/CP	TTHLW	ND	1	L	?	I			14.8		7.2		--		--		--		--		--		--		--		--		--		--	
0197	0026	3	6	OV/CP	TTHLW	ND	1	L	?	8			--		--		--		15.6		9.1		2.4		--		--		--		--		--		--	
0197	0027	3	6	OV/CP	TTHLW	ND	1	L	?	S			--		--		--		--		--		--		22.0		7.4		--		--		--		--	
0192	0011	3	6	OV/CP	TTHLW	ND	1	R	?	6			--		--		--		--		--		--		20.0		6.9	E	34.5		5.5		--		--	
0182	0009	3	6	OV/CP	TTHLW	ND	1	L	?	6			--		--		--		14.0		8.2		19.3		--		--		--		--		--		--	
0713	0014	3	6	OV/CP	TTHLW	ND	1	R	?	J			--		--		--		18.1		7.6	E	30.0		--		--		--		--		--		--	
0713	0013	3	6	OV/CP	TTHLW	ND	1	L	?	4			15.8		7.1		--		--		--		--		--		--		--		--		--		--	
2303	0008	3	6	OV/CP	TTHLW	ND	1	R	?	Y			16.8		6.6		28.0		--		--		--		--		--		--		--		--		--	
2103	0029	3	6	OV/CP	TTHLW	ND	1	L	?	S			--		--		--		--		--		--		24.3		8.1		35.7		4.4		--		--	
2104	0008	3	6	OV/CP	TTHLW	ND	1	L	?	I			--		--		--	E	16.4		6.7		--		--		--		--		--		--		--	
2102	0002	3	6	OV/CP	TTHLW	ND	1	L	?	J			--		--		--		15.5		6.9		25.1		--		--		--		--		--		--	
0214	0006	3	6	OV/CP	TTHLW	ND	1	L	?	S			--		--		--		--		--		--		21.6		7.6		27.7		4.3		--		--	
0214	0007	3	6	OV/CP	TTHLW	ND	1	R	?	S			--		--		--		--		--		--		21.3		7.0		32.1		4.4		--		--	
0199	0018	3	6	OV/CP	TTHLW	ND	1	L	?	4			--		--		--		15.4		6.4		--		--		--		--		--		--		--	
0199	0011	3	6	OV/CP	TTHLW	ND	1	R	?	8			--		--		--		15.8		9.1		22.7		--		--		--		--		--		--	
0199	0015	3	6	OV/CP	TTHLW	ND	1	L	?	I			15.0		6.5		23.5		--		--		--		--		--		--		--		--		--	
0199	0016	3	6	OV/CP	TTHLW	ND	1	L	?	I			--		--		--		17.5		6.3		--		--		--		--		--		--		--	
0199	0017	3	6	OV/CP	TTHLW	ND	1	L	?	4			14.5		6.4		22.5		--		--		--		--		--		--		--		--		--	
0198	0006	3	6	OV/CP	TTHLW	ND	1	L	?	I			--		--		--		17.4		6.8		--		--		--		--		--		--		--	
2111	0031	3	6	OV/CP	TTHLW	ND	1	L	?	J			--		--		--		--		--		--		23.2		6.9		32.5		5.2		--		--	
2113	0039	3	6	OV/CP	TTHLW	ND	1	R	?	8			--		--		--		15.1		9.1		25.5		--		--		--		--		--		--	
2113	0040	3	6	OV/CP	TTHLW	ND	1	L	?	A			--		--		--		--		--		--		22.5		8.0		22.8		4.2		--		--	
2108	0060	3	6	OV/CP	TTHLW	ND	1	R	?	S			--		--		--		15.0		8.1		24.9		--		--		--		--		--		--	
2108	0061	3	6	OV/CP	TTHLW	ND	1	R	?	6			--		--		--		--		--		--		24.0		7.2		33.4		4.3		--		--	
2107	0013	3	6	OV/CP	TTHLW	ND	1	R	?	6			12.6		7.6		17.8		--		--		--		--		--		--		--		--		--	
2108	0052	3	6	OV/CP	TTHLW	ND	1	R	?	6			12.7		7.3		11.5		--		--		--		--		--		--		--		--		--	
2309	0031	3	6	OV/CP	TTHLW	ND	1	R	?	J			--		--		--	E	16.0		7.9		27.5		--		--		--		--		--		--	
2309	0032	3	6	OV/CP	TTHLW	ND	1	L	?	6			--		--		--		14.0		8.0		19.5		--		--		--		--		--		--	
2308	0030	3	6	OV/CP	TTHLW	ND	1	L	?	A			--		--		--		--		--		--		22.7		7.2		20.2		4.8		--		--	
2308	0031	3	6	OV/CP	TTHLW	ND	1	R	?	S			--		--		--		14.9	E	7.8		23.5		--		--		--		--		--		--	
2307	0017	3	6	OV/CP	TTHLW	ND	1	L	?	J	4		13.8		8.1		17.3		--		--		--		--		--		--		--		--		--	
2112	0016	3	6	OV/CP	TTHLW	ND	1	L	?	S			--		--		--		--		7.8		18.5		--		--		--		--		--		--	
2112	0014	3	6	OV/CP	TTHLW	ND	1	L	?	J			--		--		--		16.5		7.5		30.0		--		--		--		--		--		--	
2112	0015	3	6	OV/CP	TTHLW	ND	1	R	?	J			12.9		7.1		22.0		--		--		--		--		--		--		--		--		--	
2112	0004	3	6	OV/CP	TTHLW	ND	1	L	?	J			--		--		--		--		--		--		--		7.7	E	34.0		5.3		--		--	
2112	0010	3	6	OV/CP	TTHLW	ND	1	L	?	8			--		6.0		5.2		--		--		--		--		--		--		--		--		--	
2112	0012	3	6	OV/CP	TTHLW	ND	1	L	?	6			14.1		7.7		20.6		--		--		--		--		--		--		--		--		--	
2112	0013	3	6	OV/CP	TTHLW	ND	1	L	?	I			15.4		6.7	E	25.5		--		--		--		--		--		--		--		--		--	
1942	0027	3	6	OV/CP	TTHLW	ND	1	L	?	8			--		--		--		--		--		--		23.5		7.6		23.5		4.3		--		--	
1942	0028	3	6	OV/CP	TTHLW	ND	1	L	?	6			--		--		--		14.7		8.0		24.0		--		--		--		--		--		--	
1942	0026	3	6	OV/CP	TTHLW	ND	1	L	?	J			--		--		--		--		--		--	E	21.5		7.1		--		4.2		--		--	
2115	0013	3	6	OV/CP	TTHLW	ND	1	L	?	6			--		7.4		17.5		--		--		--		--		--		--		--		--		--	
2115	0010	3	6	OV/CP	TTHLW	ND	1	L	?	J			--		--		--		17.0		6.8		31.7		--		--		--		--		--		--	
2115	0011	3	6	OV/CP	TTHLW	ND	1	L	?	4			16.4		7.0		24.8		--		--		--		--		--		--		--		--		--	
0876	0009	3	6	OV/CP	TTHLW	ND	1	R	?	6			12.8		6.9		14.0		--		--		--		--		--		--		--		--		--	
0877	0002	3	6	OV/CP	TTHLW	ND	1	R	?	6			--		--		--		--		--		--		22.5		7.0		33.0		4.8		--		--	

KEY IDENTIFICATION CHARAC. MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

LOC	BON	F	M	ANM	ELM	DOM	C	S	SX	A	B	C M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
0884	0001	3	6	OV/CP	TTHLW	ND	1	R	?	6		--	--	--	--	--	--	23.2	6.8	35.0	4.2	--	--	
2121	0001	3	6	OV/CP	TTHLW	ND	1	L	?	A		--	--	--	14.0	9.1	11.5	--	--	--	--	--	--	
2117	0017	3	6	OV/CP	TTHLW	ND	1	L	?	A		--	--	--	--	--	--	24.4	8.8	--	6.5	--	--	
0763	0005	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	17.2	7.4	E 30.0	--	--	--	--	--	--	
2128	0006	3	6	OV/CP	TTHLW	ND	1	R	?	A		--	--	--	--	--	--	E 22.0	8.2	--	--	--	--	
2129	0003	3	6	OV/CP	TTHLW	ND	1	R	?	4		14.3	6.3	24.0	--	--	--	--	--	--	--	--	--	
2129	0004	3	6	OV/CP	TTHLW	ND	1	R	?	6		--	--	--	14.8	7.7	26.9	--	--	--	--	--	--	
2128	0005	3	6	OV/CP	TTHLW	ND	1	R	?	J		13.0	7.2	21.0	--	--	--	--	--	--	--	--	--	
2122	0010	3	6	OV/CP	TTHLW	ND	1	L	?	S		--	--	--	--	--	--	22.3	8.4	20.5	5.3	--	--	
2125	0015	3	6	OV/CP	TTHLW	ND	1	R	?	J		--	--	--	15.5	6.5	29.0	--	--	--	--	--	--	
0817	0008	3	6	OV/CP	TTHLW	ND	1	L	?	A		--	--	--	14.4	9.0	10.0	--	--	--	--	--	--	
0780	0002	3	6	OV/CP	TTHLW	ND	1	L	?	A		--	--	--	--	--	--	E 22.5	8.0	14.0	5.3	--	--	
0180	0013	3	6	OV/CP	TTHLW	ND	1	R	?	Y		E 13.5	7.4	17.5	--	--	--	--	--	--	--	--	--	
0180	0015	3	6	OV/CP	TTHLW	ND	1	L	?	A		--	--	--	--	--	--	24.6	8.6	15.5	4.7	--	--	
0160	0012	3	6	OV/CP	TTHLW	ND	4	R	?	Y		12.9	6.5	16.5	--	--	--	--	--	--	--	--	--	
0160	0028	3	6	OV/CP	TTHLW	ND	1	L	?	Y		15.2	7.2	--	--	--	--	--	--	--	--	--	--	
0160	0025	3	6	OV/CP	TTHLW	ND	1	R	?	4		E 14.0	6.6	22.0	--	--	--	--	--	--	--	--	--	
0160	0026	3	6	OV/CP	TTHLW	ND	1	R	?	J		--	--	--	15.7	6.7	33.5	--	--	--	--	--	--	
0160	0027	3	6	OV/CP	TTHLW	ND	1	R	?	A		--	--	--	--	--	--	23.0	8.3	7.5	E 6.5	--	--	
3745	0003	3	1	OVIS	SKULL	ND	1	M	?M	S		--	--	--	51.8	44.5	17.9	--	--	--	--	--	--	
0747	0025	3	1	OVIS	SKULL	ND	4	M	M	A		--	--	--	--	--	21.2	--	--	--	--	--	--	
1930	0103	3	1	OVIS	SKULL	ND	1	M	M	S		--	--	--	56.3	51.0	20.5	--	--	21.5	69.5	--	--	
3728	0007	3	1	OVIS	HORN	ND	2	L	F	8		--	53.0	--	--	25.0	14.0	64.5	--	--	--	--	--	
0293	0004	3	1	OVIS	AXIS	ND	3	M	?M	A		--	45.9	E 42.0	--	--	E 18.0	--	--	--	--	--	--	
3743	0001	3	1	OVIS	AXIS	ND	4	M	?	Y		U 44.0	U 35.0	40.0	20.0	E 40.0	14.4	--	--	--	--	--	--	
0296	0004	3	1	OVIS	SCAP	ND	3	L	?	8		--	--	32.3	26.0	--	--	--	--	--	--	--	--	
0306	0010	3	1	OVIS	SCAP	ND	4	R	?	?		18.5	31.2	26.9	20.2	21.4	--	--	--	--	--	--	--	
3753	0063	3	1	OVIS	SCAP	ND	4	L	?	6		20.7	30.5	24.5	21.5	21.2	--	--	--	--	--	--	--	
3750	0034	3	1	OVIS	SCAP	ND	4	R	?	8		20.2	30.7	24.6	20.0	23.2	--	--	--	--	--	--	--	
3742	0013	3	1	OVIS	SCAP	ND	1	R	?	8		22.1	--	--	--	--	--	--	--	--	--	--	--	
0290	0001	3	1	OVIS	SCAP	ND	1	L	?	8		17.5	32.0	25.3	20.4	E 16.6	155.0	163.5	--	--	--	--	--	
1343	0027	3	1	OVIS	SCAP	ND	4	R	?	?		--	E 30.5	E 26.1	E 18.7	--	--	--	--	--	--	--	--	
1918	0042	3	1	OVIS	SCAP	ND	3	L	?	?		20.2	--	--	--	--	--	--	--	--	--	--	--	
1915	0143	3	1	OVIS	SCAP	ND	1	R	?	8		--	--	26.0	E 25.0	--	--	--	--	--	--	--	--	
0728	0005	3	1	OVIS	SCAP	ND	4	R	?	8		21.0	E 34.0	E 28.5	E 22.5	E 20.0	--	--	--	--	--	--	--	
0171	0069	3	1	OVIS	SCAP	ND	3	L	?	?		19.5	--	--	--	--	--	--	--	--	--	--	--	
0171	0070	3	1	OVIS	SCAP	ND	3	L	?	?		20.0	--	--	--	--	--	--	--	--	--	--	--	
1933	0088	3	1	OVIS	SCAP	ND	1	L	?	8		24.7	40.0	30.0	25.0	24.5	--	--	--	--	--	--	--	
1931	0013	3	1	OVIS	SCAP	ND	4	R	?	8		23.8	39.0	30.0	27.2	21.5	--	--	--	--	--	--	--	
0170	0010	3	1	OVIS	SCAP	ND	3	R	?	8		E 20.8	29.8	E 25.0	21.6	--	--	--	--	--	--	--	--	
0206	0048	3	1	OVIS	SCAP	ND	3	R	?	Y		--	32.5	26.7	--	18.9	--	--	--	--	--	--	--	
0203	0009	3	1	OVIS	SCAP	ND	4	R	?	?		20.1	E 28.3	23.2	19.3	--	--	--	--	--	--	--	--	
2109	0010	3	1	OVIS	SCAP	ND	4	R	?	?		E 19.0	30.2	25.2	19.6	--	--	--	--	--	--	--	--	
2115	0030	3	1	OVIS	SCAP	ND	4	L	?	8		E 23.1	36.3	27.3	23.6	22.0	--	--	--	--	--	--	--	
0877	0006	3	1	OVIS	SCAP	ND	4	R	?	8		19.2	33.3	25.6	20.5	22.2	--	--	--	--	--	--	--	
0887	0004	3	1	OVIS	SCAP	ND	3	R	?	?		17.4	--	--	--	--	--	--	--	--	--	--	--	
1313	0017	3	1	OVIS	HUMER	ND	1	R	?	?		30.2	26.8	--	--	--	--	--	--	--	--	--	--	
0550	0004	3	1	OVIS	HUMER	ND	4	L	?	?		29.1	28.5	--	--	--	--	--	--	--	--	--	--	
0545	0003	3	1	OVIS	HUMER	ND	4	L	?	A		E 33.0	41.5	--	--	--	--	--	--	--	--	--	--	
0468	0003	3	1	OVIS	HUMER	ND	1	L	?	8		31.2	29.2	--	--	--	--	--	--	--	--	--	--	
0543	0006	3	1	OVIS	HUMER	ND	4	R	?	A		31.0	29.1	--	--	--	--	--	--	--	--	--	--	
0305	0005	3	1	OVIS	HUMER	ND	1	R	?	8		31.0	29.2	--	--	--	--	--	--	--	--	--	--	
0296	0006	3	1	OVIS	HUMER	ND	1	R	?	6		33.0	--	--	--	--	--	--	--	--	--	--	--	
3759	0004	3	1	OVIS	HUMER	ND	3	R	?	?		E 32.0	--	--	--	--	--	--	--	--	--	--	--	
3766	0002	3	1	OVIS	HUMER	ND	3	L	?	8		E 39.0	35.3	--	--	--	--	--	--	--	--	--	--	
3750	0038	3	1	OVIS	HUMER	ND	1	R	?	A		--	--	--	38.6	42.5	--	--	--	--	--	--	--	
3745	0020	3	1	OVIS	HUMER	ND	4	L	?	8		E 33.5	--	--	--	--	--	--	--	--	--	--	--	
3745	0021	3	1	OVIS	HUMER	ND	1	L	?	4		29.5	28.0	--	--	--	--	--	--	--	--	--	--	
3738	0010	3	1	OVIS	HUMER	ND	4	L	?	8		25.8	24.8	11.5	--	--	--	--	--	--	--	--	--	
3712	0020	3	1	OVIS	HUMER	ND	3	R	?	8		--	32.7	--	--	--	--	--	--	--	--	--	--	
3710	0002	3	1	OVIS	HUMER	ND	1	L	?	S		32.0	29.7	14.1	--	--	--	--	--	--	--	--	--	
3710	0003	3	1	OVIS	HUMER	ND	1	R	?	A		33.1	30.2	--	--	--	--	--	--	--	--	--	--	
1305	0001	3	1	OVIS	HUMER	ND	1	R	?	6		E 25.5	--	13.7	--	--	--	--	--	--	--	--	--	
0469	0003	3	1	OVIS	HUMER	ND	1	L	?	8		E 28.0	--	--	--	--	--	--	--	--	--	--	--	
0294	0004	3	1	OVIS	HUMER	ND	1	R	?	8		31.3	27.5	13.9	--	--	--	--	--	--	--	--	--	
1906	0006	3	1	OVIS	HUMER	ND	1	L	?	?		27.0	25.2	--	--	--	--	--	--	--	--	--	--	
1339	0002	3	1	OVIS	HUMER	ND	1	R	?	8		28.6	28.4	--	--	--	--	--	--	--	--	--	--	
1352	0012	3	1	OVIS	HUMER	ND	4	R	?	8		E 28.6	--	--	--	--	--	--	--	--	--	--	--	
1372	0001	3	1	OVIS	HUMER	ND	1	L	?	?		29.5	27.9	--	--	--	--	--	--	--	--	--	--	
0857	0006	3	1	OVIS	HUMER	ND	3	R	?	?		30.0	28.3	--	--	--	--	--	--	--	--	--	--	
0759	0001	3	1	OVIS	HUMER	ND	1	L	?	8		E 33.5	31.4	18.2	--	--	--	--	--	--	--	--	--	
0761	0008	3	1	OVIS	HUMER	ND	1	R	?	8		29.5	E 27.5	14.4	--	--	--	--	--	--	--	--	--	
0782	0002	3	1	OVIS	HUMER	ND	4	L	?	8		E 33.5	31.5	--	--	--	--	--	--	--	--	--	--	
0722	0015	3	1	OVIS	HUMER	ND	1	R	?	8		33.5	30.8	E 16.9	--	--	--	--	--	--	--	--	--	
3772	0007	3	1	OVIS	HUMER	ND	4	L	?	A		--	--	--	--	46.2	--	--	--	--	--	--	--	
3771	0003	3	1	OVIS	HUMER	ND	1	L	?	8		31.7	29.5	--	--	--	--	--	--	--	--	--	--	
0849	0013	3	1	OVIS	HUMER	ND	1	R	?	8		36.4	34.8	--	--	--	--	--	--	--	--	--	--	
1932	0093	3	1	OVIS	HUMER	ND	4	L	?	8		--	33.5	--	--	--	--	--	--	--	--	--	--	
0159	0062	3	1	OVIS	HUMER	ND	1	L	?	8		30.4	28.0	--	--	--	--	--	--	--	--	--	--	
0159	0068	3	1	OVIS	HUMER	ND	1	R	?	6		28.6	26.7	--	--	--	--	--	--	--	--	--	--	
0159	0059	3	1	OVIS	HUMER	ND	1	L	?	8		32.8	29.2	--	--	--	--	--	--	--	--	--	--	
0159	0060	3	1	OVIS	HUMER	ND	1	L	?	8		27.5	25.4	14.0	--	--	--	--	--	--	--	--	--	
1375	0010	3	1	OVIS	HUMER	ND	4	R	?	8		33.0	31.0	--	--	--	--	--	--	--	--	--	--	
0837	0006	3	1	OVIS	HUMER	ND	3	L	?	8		37.2	35.9	--	--	--	--	--	--	--	--	--	--	
0193	0003	3	1	OVIS	HUMER	ND	4	R	?	8		E 34.5	33.0	--	--	--	--	--	--	--	--	--	--	
2108	0033	3	1	OVIS	HUMER	ND	1	L	?	6		28.4	27.8	--	--	--	--	--	--	--	--	--	--	
0836	0001	3	1	OVIS	HUMER	ND	4	L	?	A		29.0	27.7	--	--	--	--	--	--	--	--	--	--	
2122	0005	3	1	OVIS	HUMER	ND	1	R	?	8		29.8	29.2	--	--	--	--	--	--	--	--	--	--	
0180	0028	3	1	OVIS	HUMER	ND	4	L	?	?	4	29.3	28.5	--	--	--	--	--	--	--	--	--	--	
0180	0026	3	1	OVIS	HUMER	ND	1	L	?	8	?	27.2	25.6	--	--	--	--	--	--	--	--	--	--	
0304	0005	3	1	OVIS	RAD	ND	4	R	?	?		E 25.7	E 24.3	E 14.9	--	--	--	--	--	--	--	--	--	
0304	0006	3	1	OVIS	RAD	ND	1	L	?	A		--	--	--	28.8	24.2	--	--	--	--	--	--	--	
0556	0014	3	1	OVIS	RAD	ND	1	R	?	S		E 28.0	E 26.5	--	--	--	--	--	--	--	--	--	--	
0544	0003	3	1	OVIS	RAD	ND	1	L	?	8		--	27.8	--	--	--	--	--	--	--	--	--	--	
0547	0003	3	1	OVIS	RAD	ND	1	R	?	A		--	--	14.9	25.2	22.1	--	--	--	--	--	--	--	
0526	0004	3	1	OVIS	RAD	ND	3	L	?	8		--	E 33.5	--	--	--	--	--	--	--	--	--	--	
0279	0026	3	1	OVIS	RAD	ND	1	L	?	8		29.8	26.6	15.6	27.3	22.4	142.5	--	--	--	--	--	--	
0280	0005	3	1	OVIS	RAD	ND	4	R	?	A		31.5	28.3	16.8	--	--	--	--	--	--	--	--	--	
0279	0021	3	1	OVIS	RAD	ND	1	R	?	4		26.5	24.3	13.3	--	--	--	--	--	--	--	--	--	
3745	0008	3	1	OVIS	RAD	ND	1	R	?	6		30.0	27.4	16.2	--	--	--	--	--	--	--	--	--	

KEY / IDENTIFICATION / CHARAC. / MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

LOC	BON	F	M	ANM	ELM	DON	C	S	SX	A B	C M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
3745	0010	3	1	OVIS	RAD	ND	1	L	?	A	--	--	14.4	27.0	23.6	--	--	--	--	--	--	--	
3745	0006	3	1	OVIS	RAD	ND	4	L	?	Y	E 23.0	22.5	12.4	--	--	--	--	--	--	--	--	--	
3738	0016	3	1	OVIS	RAD	ND	1	L	?	?	30.2	28.0	16.1	--	--	--	--	--	--	--	--	--	
3742	0006	3	1	OVIS	RAD	ND	1	L	?	J	27.8	26.0	13.8	--	--	--	U134.5	--	--	--	--	--	
3732	0012	3	1	OVIS	RAD	ND	1	R	?	A	31.1	28.3	15.6	28.1	24.0	158.0	--	--	--	--	--	--	
3721	0004	3	1	OVIS	RAD	ND	1	L	?	8	32.6	30.4	--	--	--	--	--	--	--	--	--	--	
3722	0005	3	1	OVIS	RAD	ND	4	R	?	A	35.7	32.0	--	--	--	--	--	--	--	--	--	--	
3704	0037	3	1	OVIS	RAD	ND	1	R	?	S	30.6	27.3	--	--	--	--	--	--	--	--	--	--	
1363	0004	3	1	OVIS	RAD	ND	4	R	?	?	28.8	26.5	--	--	--	--	--	--	--	--	--	--	
1351	0004	3	1	OVIS	RAD	ND	1	R	?	?	E 29.0	E 25.5	--	--	--	--	--	--	--	--	--	--	
0741	0001	3	1	OVIS	RAD	ND	1	R	?	?	29.1	26.8	--	--	--	--	--	--	--	--	--	--	
0760	0002	3	1	OVIS	RAD	ND	1	L	?	A	--	--	16.2	25.6	23.5	--	--	--	--	--	--	--	
0704	0003	3	1	OVIS	RAD	ND	1	L	?	8	34.1	31.0	E 17.8	--	--	--	--	--	--	--	--	--	
0159	0075	3	1	OVIS	RAD	ND	1	L	?	8	34.8	32.5	--	--	--	--	--	--	--	--	--	--	
0159	0084	3	1	OVIS	RAD	ND	1	R	?	Y	--	--	--	29.2	25.3	--	--	--	--	--	--	--	
1933	0060	3	1	OVIS	RAD	ND	4	L	?	8	E 37.0	35.7	--	--	--	--	--	--	--	--	--	--	
0170	0013	3	1	OVIS	RAD	ND	1	L	?	?	29.7	27.0	--	--	--	--	--	--	--	--	--	--	
0161	0048	3	1	OVIS	RAD	ND	1	R	?	8	E 26.5	E 24.0	--	--	--	--	--	--	--	--	--	--	
0194	0009	3	1	OVIS	RAD	ND	1	R	?	?	30.3	28.9	--	--	--	--	--	--	--	--	--	--	
2126	0031	3	1	OVIS	RAD	ND	1	R	?	A	--	--	--	--	E 20.5	--	--	--	--	--	--	--	
0307	0002	3	1	OVIS	ULNA	ND	1	R	?	8	16.3	24.3	21.2	--	--	--	--	--	--	--	--	--	
0325	0018	3	1	OVIS	ULNA	ND	1	R	?	?	19.0	--	--	--	--	--	--	--	--	--	--	--	
0279	0022	3	1	OVIS	ULNA	ND	1	R	?	4	15.2	21.8	18.2	--	--	--	--	--	--	--	--	--	
3712	0009	3	1	OVIS	ULNA	ND	4	R	?	8	E 18.2	23.2	19.0	--	--	--	--	--	--	--	--	--	
1906	0014	3	1	OVIS	ULNA	ND	1	L	?	?	18.0	--	--	--	--	--	--	--	--	--	--	--	
1320	0003	3	1	OVIS	ULNA	ND	1	L	?	8	15.8	24.1	21.3	--	--	--	--	--	--	--	--	--	
1323	0004	3	1	OVIS	ULNA	ND	4	L	?	?	E 17.8	E 25.5	--	--	--	--	--	--	--	--	--	--	
0312	0006	3	1	OVIS	ULNA	ND	4	L	?	8	19.4	--	--	--	--	--	--	--	--	--	--	--	
0312	0007	3	1	OVIS	ULNA	ND	1	R	?	8	E 16.5	27.0	E 24.0	--	--	--	--	--	--	--	--	--	
0314	0007	3	1	OVIS	ULNA	ND	4	R	?	?	16.1	--	--	--	--	--	--	--	--	--	--	--	
3772	0005	3	1	OVIS	ULNA	ND	3	R	?	Y	--	U 27.2	U 24.8	--	--	--	--	--	--	--	--	--	
1918	0036	3	1	OVIS	ULNA	ND	3	L	?	?	16.6	--	--	--	--	--	--	--	--	--	--	--	
0159	0291	3	1	OVIS	ULNA	ND	4	R	?	J	20.5	26.5	22.5	--	--	--	--	--	--	--	--	--	
0206	0013	3	1	OVIS	ULNA	ND	4	R	?	J	E 19.8	27.8	23.8	--	--	--	--	--	--	--	--	--	
0206	0012	3	1	OVIS	ULNA	ND	1	R	?	J	17.8	22.1	19.7	--	--	--	--	--	--	--	--	--	
0191	0007	3	1	OVIS	ULNA	ND	4	L	?	8	19.4	--	--	--	--	--	--	--	--	--	--	--	
0877	0005	3	1	OVIS	ULNA	ND	3	L	?	Y	U 18.3	U 23.5	U 21.1	--	--	--	--	--	--	--	--	--	
1317	0016	3	1	OVIS	MC3+4	ND	3	L	?	4	21.8	E 13.7	11.2	--	--	--	100.5	--	--	--	--	--	
1918	0002	3	1	OVIS	MC3+4	ND	1	?	?	8	--	--	--	E 24.5	15.5	--	--	--	--	--	--	--	
1923	0023	3	1	OVIS	MC3+4	ND	1	R	?	8	--	--	--	30.0	17.7	--	--	--	--	--	--	--	
1930	0077	3	1	OVIS	MC3+4	ND	1	?	?	8	--	--	--	E 28.5	17.5	--	--	--	--	--	--	--	
2112	0045	3	1	OVIS	MC3+4	ND	1	R	?	4	--	--	--	24.2	15.0	--	--	--	--	--	--	--	
0360	0001	3	1	OVIS	PELV	ND	1	R	F	6	26.9	22.5	E163.0	E186.0	--	16.4	9.3	31.5	--	--	--	--	
3750	0047	3	1	OVIS	PELV	ND	1	R	F	6	--	--	--	--	--	14.6	9.4	--	--	--	--	--	
1317	0018	3	1	OVIS	PELV	ND	1	R	F	8	29.8	E 25.0	176.5	196.5	--	--	--	--	--	--	--	--	
1940	0010	3	1	OVIS	PELV	ND	1	R	F	8	E 25.0	25.5	--	--	--	--	--	--	--	--	--	--	
0198	0020	3	1	OVIS	PELV	ND	4	L	?F	?	24.0	20.2	--	--	--	--	--	--	--	--	--	--	
0191	0002	3	1	OVIS	PELV	ND	4	R	F	S	27.3	21.8	--	--	--	--	--	--	--	--	--	--	
2110	0013	3	1	OVIS	PELV	ND	1	R	F	8	23.2	18.0	--	--	--	--	--	--	--	--	--	--	
2115	0038	3	1	OVIS	PELV	ND	1	R	F	8	24.0	--	--	--	--	--	--	--	--	--	--	--	
1315	0004	3	1	OVIS	IL/IS	ND	1	L	F	8	30.2	--	--	--	--	--	--	--	--	--	--	--	
2309	0069	3	1	OVIS	IL/IS	ND	1	R	?F	?	25.5	--	--	--	--	--	--	--	--	--	--	--	
0304	0008	3	1	OVIS	FEMUR	ND	1	R	?	8	42.0	18.7	--	--	--	--	--	--	--	--	--	--	
0309	0025	3	1	OVIS	FEMUR	ND	1	R	?	A	E 37.7	18.2	--	--	--	--	--	--	--	--	--	--	
0297	0003	3	1	OVIS	FEMUR	ND	4	R	?	A	--	--	--	44.0	20.0	--	--	--	--	--	--	--	
3750	0022	3	1	OVIS	FEMUR	ND	3	L	?	8	--	17.9	--	--	--	--	--	--	--	--	--	--	
3750	0018	3	1	OVIS	FEMUR	ND	1	R	?	8	43.5	19.9	--	--	--	--	--	--	--	--	--	--	
3750	0020	3	1	OVIS	FEMUR	ND	1	R	?	S	41.8	18.9	--	--	--	--	--	--	--	--	--	--	
3738	0019	3	1	OVIS	FEMUR	ND	1	L	?	8	E 40.0	18.4	--	--	--	--	--	--	--	--	--	--	
3704	0051	3	1	OVIS	FEMUR	ND	1	R	?	8	39.2	18.5	--	--	--	--	--	--	--	--	--	--	
0716	0017	3	1	OVIS	FEMUR	ND	1	R	?	8	--	18.1	--	--	--	--	--	--	--	--	--	--	
1348	0007	3	1	OVIS	FEMUR	ND	4	R	?	8	--	20.3	--	--	--	--	--	--	--	--	--	--	
1918	0024	3	1	OVIS	FEMUR	ND	4	R	?	8	--	18.5	--	--	--	--	--	--	--	--	--	--	
0159	0122	3	1	OVIS	FEMUR	ND	1	L	?	8	--	20.0	--	--	--	--	--	--	--	--	--	--	
0180	0051	3	1	OVIS	FEMUR	ND	1	R	?	8	--	19.1	--	--	--	--	--	--	--	--	--	--	
0304	0009	3	1	OVIS	TIBIA	ND	1	L	?	?	--	12.5	22.8	17.4	--	--	--	--	--	--	--	--	
0279	0014	3	1	OVIS	TIBIA	ND	4	R	?	8	38.8	--	--	--	--	37.9	--	--	--	--	--	--	
3765	0092	3	1	OVIS	TIBIA	ND	1	L	?	8	--	13.6	23.7	18.2	--	--	--	--	--	--	--	--	
3755	0014	3	1	OVIS	TIBIA	ND	4	R	?	J	--	--	24.9	19.5	--	--	--	--	--	--	--	--	
3745	0013	3	1	OVIS	TIBIA	ND	3	R	?	8	--	15.7	24.7	--	--	--	--	--	--	--	--	--	
3745	0018	3	1	OVIS	TIBIA	ND	1	L	?	8	--	13.5	E 25.0	20.0	--	--	--	--	--	--	--	--	
3732	0022	3	1	OVIS	TIBIA	ND	1	L	?	8	--	E 13.5	25.0	19.8	--	--	--	--	--	--	--	--	
3736	0014	3	1	OVIS	TIBIA	ND	4	R	?	A	40.0	E 15.5	--	--	--	--	--	--	36.9	--	--	--	
3721	0002	3	1	OVIS	TIBIA	ND	4	R	?	A	27.2	--	--	--	--	--	--	--	--	--	--	--	
3722	0005	3	1	OVIS	TIBIA	ND	3	L	?	8	E 39.0	--	--	--	--	--	--	--	36.0	--	--	--	
0555	0016	3	1	OVIS	TIBIA	ND	1	R	?	8	--	E 13.3	E 23.5	19.5	--	--	--	--	--	--	--	--	
0466	0010	3	1	OVIS	TIBIA	ND	3	L	?	8	--	11.9	23.5	18.7	--	--	--	--	--	--	--	--	
3766	0014	3	1	OVIS	TIBIA	ND	4	R	?	8	--	--	26.7	21.0	--	--	--	--	--	--	--	--	
0286	0020	3	1	OVIS	TIBIA	ND	1	L	?	8	--	--	--	21.4	--	--	--	--	--	--	--	--	
1315	0003	3	1	OVIS	TIBIA	ND	4	R	?	S	--	--	24.7	19.1	--	--	--	--	--	--	--	--	
1338	0002	3	1	OVIS	TIBIA	ND	1	L	?	8	--	12.0	22.6	18.7	--	--	--	--	--	--	--	--	
1353	0004	3	1	OVIS	TIBIA	ND	4	L	?	A	38.0	--	--	--	--	--	--	--	37.2	--	--	--	
1918	0003	3	1	OVIS	TIBIA	ND	1	R	?	8	--	--	27.4	21.7	--	--	--	--	--	--	--	--	
0719	0019	3	1	OVIS	TIBIA	ND	1	R	?	8	--	13.3	24.4	19.0	--	--	--	--	--	--	--	--	
0159	0108	3	1	OVIS	TIBIA	ND	1	L	?	8	--	14.0	23.5	19.8	--	--	--	--	--	--	--	--	
1934	0015	3	1	OVIS	TIBIA	ND	1	L	?	8	--	--	28.6	23.8	--	--	--	--	--	--	--	--	
1934	0015	3	1	OVIS	TIBIA	ND	1	L	?	8	--	--	28.6	23.8	--	--	--	-	--	--	--	--	
1933	0066	3	1	OVIS	TIBIA	ND	1	L	?	8	--	--	25.2	19.8	--	--	--	--	--	--	--	--	
0214	0021	3	1	OVIS	TIBIA	ND	1	R	?	6	--	--	25.4	18.8	--	--	--	--	--	--	--	--	
2115	0057	3	1	OVIS	TIBIA	ND	1	R	?	J	--	--	24.2	20.2	--	--	--	--	--	--	--	--	
0304	0010	3	1	OVIS	TALUS	ND	1	L	?	?	25.0	24.3	13.3	--	16.3	14.9	--	--	--	--	--	--	
0547	0010	3	1	OVIS	TALUS	ND	1	R	?	?	27.0	25.7	15.5	--	17.9	16.3	--	--	--	--	--	--	
0399	0037	3	1	OVIS	TALUS	ND	1	L	?	8	E 29.0	28.0	16.8	--	--	17.7	--	--	--	--	--	--	
3767	0037	3	1	OVIS	TALUS	ND	4	R	?	?	E 25.5	E 24.5	14.3	--	17.5	--	--	--	--	--	--	--	
3767	0036	3	1	OVIS	TALUS	ND	1	L	?	?	23.4	22.3	13.3	--	15.3	14.0	--	--	--	--	--	--	
3765	0015	3	1	OVIS	TALUS	ND	1	L	?	?	29.9	28.3	16.0	--	19.4	17.2	--	--	--	--	--	--	
3752	0018	3	1	OVIS	TALUS	ND	3	R	?	?	E 26.5	25.4	14.4	--	17.2	15.5	--	--	--	--	--	--	
1304	0004	3	1	OVIS	TALUS	ND	1	R	?	?	28.0	27.3	15.1	--	17.5	17.3	--	--	--	--	--	--	
3766	0019	3	1	OVIS	TALUS	ND	1	R	?	?	32.0	30.8	17.3	--	20.3	18.0	--	--	--	--	--	--	
1326	0001	3	1	OVIS	TALUS	ND	1	L	?	?	27.7	26.0	14.9	--	19.0	17.1	--	--	--	--	--	--	

KEY IDENTIFICATION CHARAC. MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

LOC	BON	F	M	ANM	ELM	DOM	C	S	SX	A	B	C M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
1320	0002	3	1	OVIS	TALUS	ND	1	R	?	?		28.2	25.9	15.7	--	18.2	16.8	--	--	--	--	--	--	
0774	0009	3	6	OVIS	TALUS	ND	1	L	?	8		27.3	25.8	15.7	--	17.8	15.8	--	--	--	--	--	--	
1351	0011	3	1	OVIS	TALUS	ND	1	L	?	?		--	28.5	--	--	18.8	--	--	--	--	--	--	--	
0801	0005	3	1	OVIS	TALUS	ND	4	R	?	?		27.9	26.6	E 14.0	--	16.5	16.7	--	--	--	--	--	--	
3771	0002	3	1	OVIS	TALUS	ND	1	R	?	?		28.0	26.6	15.0	--	16.0	--	--	--	--	--	--	--	
0724	0007	3	1	OVIS	TALUS	ND	1	L	?	8		30.7	29.5	16.4	--	19.2	17.6	--	--	--	--	--	--	
0709	0009	3	1	OVIS	TALUS	ND	3	R	?	?		29.3	27.5	15.9	--	18.0	16.6	--	--	--	--	--	--	
1914	0010	3	1	OVIS	TALUS	ND	1	L	?	?		26.8	25.7	15.1	--	17.0	15.8	--	--	--	--	--	--	
0851	0010	3	1	OVIS	TALUS	ND	1	L	?	?		31.2	29.7	17.8	--	21.2	18.7	--	--	--	--	--	--	
0167	0013	3	1	OVIS	TALUS	ND	1	R	?	?		30.8	29.2	17.5	--	18.8	17.5	--	--	--	--	--	--	
1932	0013	3	1	OVIS	TALUS	ND	1	R	?	8		28.4	27.3	16.1	--	18.3	--	--	--	--	--	--	--	
0785	0028	3	1	OVIS	TALUS	ND	1	L	?	?		28.6	27.3	16.3	--	18.0	17.5	--	--	--	--	--	--	
0159	0103	3	1	OVIS	TALUS	ND	1	L	?	8		28.0	27.1	15.5	--	E 17.5	17.3	--	--	--	--	--	--	
0159	0001	3	1	OVIS	TALUS	ND	1	L	?	?		28.5	27.6	16.0	--	19.1	16.5	--	--	--	--	--	--	
0159	0001	3	1	OVIS	TALUS	ND	1	L	?	?		28.5	27.6	16.0	--	19.1	16.5	--	--	--	--	--	--	
0159	0002	3	1	OVIS	TALUS	ND	1	R	?	?		27.0	25.3	15.7	--	18.1	16.7	--	--	--	--	--	--	
0159	0003	3	1	OVIS	TALUS	ND	4	L	?	?		27.6	26.3	15.1	--	E 16.7	E 16.2	--	--	--	--	--	--	
1933	0072	3	1	OVIS	TALUS	ND	4	L	?	8		28.7	27.2	E 16.5	--	19.3	--	--	--	--	--	--	--	
1933	0071	3	1	OVIS	TALUS	ND	1	L	?	8		29.7	28.2	16.7	-	18.7	16.7	--	--	--	--	--	--	
1933	0067	3	1	OVIS	TALUS	ND	1	L	?	8		27.9	26.0	15.6	--	17.0	16.6	--	--	--	--	--	--	
0170	0007	3	1	OVIS	TALUS	ND	4	L	?	?		E 25.8	E 26.5	E 15.0	--	E 16.4	E 16.9	--	--	--	--	--	--	
0161	0066	3	1	OVIS	TALUS	ND	4	L	?	?		E 31.0	29.8	17.0	--	18.5	19.6	--	--	--	--	--	--	
0161	0067	3	1	OVIS	TALUS	ND	4	R	?	?		E 26.7	26.0	E 14.7	--	E 16.8	E 16.0	--	--	--	--	--	--	
0161	0069	3	1	OVIS	TALUS	ND	3	L	?	Y		--	25.0	--	--	--	--	--	--	--	--	--	--	
0207	0002	3	1	OVIS	TALUS	ND	1	L	?	8	4	30.3	27.8	17.1	--	19.3	17.7	--	--	--	--	--	--	
0207	0003	3	1	OVIS	TALUS	ND	1	L	?	?	7	--	--	16.5	--	--	16.8	--	--	--	--	--	--	
0214	0023	3	1	OVIS	TALUS	ND	1	L	?	8		30.0	28.2	16.7	--	18.8	17.1	--	--	--	--	--	--	
0214	0022	3	1	OVIS	TALUS	ND	1	R	?	?		26.0	25.3	14.9	--	17.3	--	--	--	--	--	--	--	
0193	0001	3	1	OVIS	TALUS	ND	1	L	?	8	7	29.7	28.8	16.5	--	19.2	17.7	--	--	--	--	--	--	
2111	0029	3	1	OVIS	TALUS	ND	1	R	?	?		28.0	--	16.1	--	--	17.5	--	--	--	--	--	--	
0878	0002	3	1	OVIS	TALUS	ND	1	R	?	?		29.7	29.1	16.7	--	19.4	18.5	--	--	--	--	--	--	
0852	0003	3	1	OVIS	TALUS	ND	1	L	?	?		29.4	27.2	16.6	--	18.4	17.4	--	--	--	--	--	--	
0180	0023	3	1	OVIS	TALUS	ND	1	R	?	?	?	29.1	28.3	15.8	--	18.7	16.7	--	--	--	--	--	--	
0160	0017	3	1	OVIS	TALUS	ND	4	L	?	?		--	26.1	--	--	15.8	--	--	--	--	--	--	--	
0304	0011	3	1	OVIS	CALC	ND	1	L	?	8		51.9	15.4	23.1	--	--	19.4	--	--	--	--	--	--	
0399	0035	3	1	OVIS	CALC	ND	4	L	?	J		--	16.7	--	--	--	18.3	--	--	--	--	--	--	
3752	0017	3	1	OVIS	CALC	ND	1	L	?	8		--	15.2	21.4	--	--	E 18.0	--	--	--	--	--	--	
3722	0006	3	1	OVIS	CALC	ND	1	L	?	6		U 54.8	16.0	22.1	--	--	19.5	--	--	--	--	--	--	
3766	0018	3	1	OVIS	CALC	ND	1	L	?	8		51.3	15.6	20.1	--	--	18.4	--	--	--	--	--	--	
1338	0006	3	1	OVIS	CALC	ND	1	L	?	8		60.6	20.0	23.8	--	--	20.7	--	--	--	--	--	--	
1367	0001	3	1	OVIS	CALC	ND	1	R	?M	A		E 62.0	18.2	24.2	--	--	21.7	--	--	--	--	--	--	
1343	0026	3	1	OVIS	CALC	ND	1	L	?	8		56.3	19.3	E 23.0	--	--	19.8	--	--	--	--	--	--	
0159	0101	3	1	OVIS	CALC	ND	1	L	?	8		55.9	18.3	21.3	--	--	22.2	--	--	--	--	--	--	
0159	0008	3	1	OVIS	CALC	ND	1	R	?	J		--	16.4	21.6	--	53.7	E 19.2	--	--	--	--	--	--	
1933	0068	3	1	OVIS	CALC	ND	1	L	?	8		54.4	17.5	21.6	--	--	19.5	--	--	--	--	--	--	
0732	0014	3	1	OVIS	CALC	ND	1	R	?	J		--	U 17.0	U 22.2	20.3	U 56.4	--	--	--	--	--	--	--	
2109	0004	3	1	OVIS	CALC	ND	1	R	?	8		59.1	17.1	23.5	--	--	21.7	--	--	--	--	--	--	
2307	0065	3	1	OVIS	CALC	ND	1	R	?	Y		U 53.3	15.3	21.5	--	--	18.5	--	--	--	--	--	--	
0159	0104	3	1	OVIS	T-C+4	ND	1	L	?	8		22.7	--	--	--	--	--	--	--	--	--	--	--	
1933	0069	3	1	OVIS	T-C+4	ND	1	L	?	8		21.3	--	--	--	--	--	--	--	--	--	--	--	
0293	0011	3	1	OVIS	MT3+4	ND	1	L	?	8		21.8	20.7	19.7	13.3	--	--	114.9	117.9	--	--	--	--	
3713	0014	3	1	OVIS	MT3+4	ND	1	?	?	J		--	--	--	--	--	E 15.0	--	--	--	--	--	--	
1337	0001	3	1	OVIS	MT3+4	ND	1	R	?	8		--	E 18.5	--	11.6	21.1	14.2	109.1	--	--	--	--	--	
1331	0005	3	1	OVIS	MT3+4	ND	3	R	?	?		18.3	18.2	17.1	11.0	--	--	--	--	--	--	--	--	
1918	0001	3	1	OVIS	MT3+4	ND	1	?	?	8		--	--	--	--	E 25.0	15.9	--	--	--	--	--	--	
1918	0001	3	1	OVIS	MT3+4	ND	1	?	?	8		--	--	--	--	E 25.0	15.9	--	--	--	--	--	--	
1915	0047	3	1	OVIS	MT3+4	ND	1	L	?	8	6	--	--	--	10.2	E 21.5	16.0	--	--	--	--	--	8.7	
0159	0091	3	1	OVIS	MT3+4	ND	1	L	?	8		--	--	--	--	23.0	15.9	--	--	--	--	--	--	
0159	0012	3	1	OVIS	MT3+4	ND	1	L	?	8		--	18.4	18.0	--	--	--	--	--	--	--	--	--	
0737	0003	3	1	OVIS	MT3+4	ND	4	R	MC	6		20.5	20.4	20.5	U 10.7	U 23.5	--	--	--	--	--	U126.0	U 10.5	
3707	0033	3	1	OVIS	PH1	ND	4	5	?	8	6	34.3	[illegible]	11.0	9.3	--	--	--	--	--	--	--	--	
0399	0041	3	1	OVIS	PH1	ND	4	4	?	8		--	[illegible]	--	--	--	--	--	--	--	--	--	--	
3745	0005	3	1	OVIS	PH1	ND	4	5	?	8		41.7	[illegible]	15.7	[illegible]	-	--	--	--	--	--	--	--	
3750	0053	3	1	OVIS	PH1	ND	1	4	?	8		35.0	11.0	10.5	[illegible]	[illegible]	--	--	--	--	--	--	--	
1333	0006	3	1	OVIS	PH1	ND	3	4	?	8		36.6	14.0	12.1	11.0	--	--	--	--	--	--	--	--	
1334	0006	3	1	OVIS	PH1	ND	4	5	?	?		33.3	11.7	11.5	10.1	--	--	--	--	--	--	--	--	
0735	0001	3	1	OVIS	PH1	ND	4	4	?	?		31.4	11.2	11.4	9.7	--	--	--	--	--	--	--	--	
0772	0001	3	1	OVIS	PH1	ND	4	5	?	?		34.6	12.0	10.5	8.9	--	--	--	--	--	--	--	--	
0159	0099	3	1	OVIS	PH1	ND	4	5	?	8		--	--	14.6	11.7	--	--	--	--	--	--	--	--	
0193	0004	3	1	OVIS	PH1	ND	3	5	?	J		E 36.0	--	12.0	10.2	--	--	--	--	--	--	--	--	
3706	0018	3	1	OVIS	PH2	ND	4	5	?	8		21.5	11.4	9.7	9.0	--	--	--	--	--	--	--	--	
0399	0042	3	1	OVIS	PH2	ND	4	4	?	8		21.5	12.2	10.0	9.8	--	--	--	--	--	--	--	--	
3749	0023	3	1	OVIS	PH2	ND	4	4	?	?		19.3	10.4	8.0	7.5	--	--	--	--	--	--	--	--	
3709	0021	3	1	OVIS	PH2	ND	3	4	?	A		20.4	P 10.8	7.0	6.8	--	--	--	--	--	--	--	--	
3711	0048	3	1	OVIS	PH2	ND	4	5	?	S		19.0	10.2	E 8.5	7.2	--	--	--	--	--	--	--	--	
3704	0022	3	1	OVIS	PH2	ND	4	4	?	8		18.9	11.0	9.4	8.6	--	--	--	--	--	--	--	--	
3704	0023	3	1	OVIS	PH2	ND	3	5	?	8		24.0	13.9	10.5	10.0	--	--	--	--	--	--	--	--	
3752	0024	3	1	OVIS	PH2	ND	1	4	?	8		24.1	11.2	8.8	7.9	--	--	--	--	--	--	--	--	
3761	0032	3	1	OVIS	PH2	ND	4	4	?	?		19.0	--	9.0	8.5	--	--	--	--	--	--	--	--	
3765	0028	3	1	OVIS	PH2	ND	4	4	?	8		--	13.1	--	9.9	--	--	--	--	--	--	--	--	
0755	0013	3	1	OVIS	PH2	ND	3	4	?	?	3	19.0	11.2	E 10.0	9.0	--	--	--	--	--	--	--	--	
0755	0014	3	1	OVIS	PH2	ND	3	4	?	?		E 19.5	10.0	8.0	6.5	--	--	--	--	--	--	--	--	
0158	0012	3	1	OVIS	PH2	ND	1	4	?	8		21.4	12.4	9.9	9.0	--	--	--	--	--	--	--	--	
0192	0012	3	1	OVIS	PH2	ND	3	4	?	8		22.0	12.4	10.4	9.6	--	--	--	--	--	--	--	--	
0183	0012	3	1	OVIS	PH2	ND	4	5	?	8		26.0	14.4	11.5	10.8	--	--	--	--	--	--	--	--	
0160	0023	3	1	OVIS	PH2	ND	3	4	?	8		E 25.5	12.9	--	9.0	--	--	--	--	--	--	--	--	
3737	0021	3	1	OVIS	PH3	ND	1	4	?	?		26.8	20.6	14.4	5.7	--	--	--	--	--	--	--	--	
3763	0068	3	1	OVIS	PH3	ND	1	4	?	?		30.2	23.9	16.3	5.5	--	--	--	--	--	--	--	--	
0731	0008	3	1	CAPRA	SKULL	ND	1	M	M	A		--	--	49.7	--	--	--	--	--	--	--	--	--	
1349	0003	3	1	CAPRA	SKULL	D	1	M	?M	8		--	--	--	--	--	30.5	--	--	--	--	--	--	
0362	0003	3	1	CAPRA	HORN	D	1	L	F	?		--	--	--	--	--	E 18.5	--	--	--	--	--	--	
1316	0007	3	1	CAPRA	HORN	D	1	L	F	?		E 88.0	84.5	E 98.0	E 91.0	25.0	15.0	68.0	--	--	--	--	--	
0197	0006	3	1	CAPRA	HORN	?D	1	R	?F	8		--	--	--	--	30.2	19.4	--	--	--	--	--	--	
2112	0029	3	1	CAPRA	HORN	D	1	L	F	8		--	20.0	--	--	28.3	16.0	71.5	--	--	--	--	--	
1942	0043	3	1	CAPRA	HORN	D	1	L	F	?		--	37.5	--	--	28.0	17.3	71.0	--	--	--	--	--	
0301	0001	3	1	CAPRA	ATLAS	ND	1	M	M	8		--	E 37.0	--	48.2	E 42.0	19.0	13.5	--	--	--	--	--	
0306	0001	3	1	CAPRA	ATLAS	ND	1	M	?F	6		--	44.0	--	47.5	43.5	E 22.8	E 16.9	10.0	--	--	--	--	
0286	0012	3	1	CAPRA	ATLAS	ND	1	M	?F	8		--	E 40.0	--	45.5	49.2	21.5	13.5	--	--	--	--	--	
0171	0063	3	1	CAPRA	ATLAS	ND	4	M	?M	8		70.0	55.0	--	--	--	--	--	--	--	--	--	--	
0885	0001	3	1	CAPRA	ATLAS	ND	4	M	?M	8		--	52.0	--	--	--	--	--	--	--	--	--	--	

KEY LOC	BON	F	M	IDENTIFICATION ANM	ELM	DOM	C	S	SX	CHARAC. A	B	C M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
0306	0002	3	1	CAPRA	AXIS	ND	4	M	?	6		--	--	42.5	22.2	--	--	--	--	--	--	--	--	
3738	0002	3	1	CAPRA	AXIS	ND	4	M	?	8		53.8	43.3	42.7	20.1	46.6	17.6	--	--	--	--	--	--	
3710	0019	3	1	CAPRA	AXIS	ND	4	M	?	?		--	--	40.2	21.7	--	--	--	--	--	--	--	--	
0286	0013	3	1	CAPRA	AXIS	ND	4	M	?	S		--	--	44.9	21.0	--	18.1	--	--	--	--	--	--	
0331	0009	3	1	CAPRA	AXIS	ND	3	M	?	6		--	--	41.2	19.0	--	--	--	--	--	--	--	--	
0795	0006	3	1	CAPRA	AXIS	ND	1	M	?	Y		--	--	42.5	20.8	--	--	--	--	--	--	--	--	
1303	0005	3	1	CAPRA	SCAP	ND	3	L	?	J		15.8	17.7	22.6	E 18.0	20.0	--	--	--	--	--	--	--	
3715	0019	3	1	CAPRA	SCAP	ND	4	R	?	A		24.3	--	28.0	24.8	25.0	--	--	--	--	--	--	--	
3707	0029	3	1	CAPRA	SCAP	ND	3	L	?	8		19.5	--	--	--	21.5	--	--	--	--	--	--	--	
0551	0001	3	1	CAPRA	SCAP	ND	1	R	?	?		16.6	27.0	22.9	18.2	19.5	--	--	--	--	--	--	--	
0525	0004	3	1	CAPRA	SCAP	ND	1	R	?	?	4	18.1	E 26.0	E 21.5	--	E 21.5	--	--	--	--	--	--	--	
0399	0013	3	1	CAPRA	SCAP	ND	1	L	?	6		E 18.3	29.3	24.8	19.6	--	--	--	--	--	--	--	--	
0355	0005	3	1	CAPRA	SCAP	ND	4	L	?	?		--	28.2	23.3	19.1	--	--	--	--	--	--	--	--	
0309	0008	3	1	CAPRA	SCAP	ND	4	R	?	?		--	30.0	24.2	--	--	--	--	--	--	--	--	--	
0309	0007	3	1	CAPRA	SCAP	ND	1	R	?	8		19.0	29.5	25.2	20.0	--	--	--	--	--	--	--	--	
0308	0003	3	1	CAPRA	SCAP	ND	4	R	?	?		16.0	26.8	22.8	17.5	21.3	--	--	--	--	--	--	--	
0296	0003	3	1	CAPRA	SCAP	ND	3	R	?	?		20.1	29.8	23.6	--	E 23.5	--	--	--	--	--	--	--	
0282	0004	3	1	CAPRA	SCAP	ND	4	L	?	?		18.1	29.5	24.5	20.3	22.3	142.0	--	--	--	--	--	--	
0306	0003	3	1	CAPRA	SCAP	ND	4	L	?	?		--	28.7	23.4	20.7	--	--	--	--	--	--	--	--	
0283	0001	3	1	CAPRA	SCAP	ND	4	R	?	8		19.1	E 29.0	--	E 20.2	22.6	--	--	--	--	--	--	--	
3761	0027	3	1	CAPRA	SCAP	ND	4	R	?	8		E 23.5	E 34.5	26.5	23.0	27.0	--	E155.0	--	--	--	--	--	
3742	0014	3	1	CAPRA	SCAP	ND	1	R	?	8		20.4	33.3	27.5	21.4	25.5	--	--	--	--	--	--	--	
1907	0001	3	1	CAPRA	SCAP	ND	4	L	?	8		23.0	--	--	23.0	30.0	--	--	--	--	--	--	--	
0317	0016	3	1	CAPRA	SCAP	ND	4	L	?	8		19.5	--	E 24.0	20.3	24.0	--	--	--	--	--	--	--	
0791	0009	3	1	CAPRA	SCAP	ND	4	R	?	?		18.2	--	--	--	--	--	--	--	--	--	--	--	
0853	0005	3	1	CAPRA	SCAP	ND	4	R	?	?		22.0	--	26.5	22.8	24.5	--	--	--	--	--	--	--	
0747	0006	3	1	CAPRA	SCAP	ND	3	R	?	?		22.2	--	--	20.2	25.0	--	--	--	--	--	--	--	
0159	0209	3	1	CAPRA	SCAP	ND	4	R	?	8		E 21.3	31.6	26.5	E 20.0	--	--	--	--	--	--	--	--	
1933	0087	3	1	CAPRA	SCAP	ND	4	L	?	Y		18.6	--	--	--	--	--	--	--	--	--	--	--	
1933	0082	3	1	CAPRA	SCAP	ND	4	R	?	Y		19.0	30.0	23.0	E 20.0	21.3	--	--	--	--	--	--	--	
1933	0086	3	1	CAPRA	SCAP	ND	1	L	?	8		24.5	37.6	29.8	25.5	E 29.5	--	--	--	--	--	--	--	
0174	0002	3	1	CAPRA	SCAP	ND	4	L	?	?		17.0	--	E 23.0	--	E 18.0	--	--	--	--	--	--	--	
0168	0001	3	1	CAPRA	SCAP	ND	4	R	?	?		20.5	--	--	21.7	26.8	--	--	--	--	--	--	--	
0166	0003	3	1	CAPRA	SCAP	ND	4	L	?	8		23.5	E 35.5	30.2	25.8	E 25.0	--	--	--	--	--	--	--	
1376	0011	3	1	CAPRA	SCAP	ND	3	R	?	8		--	37.8	31.5	27.3	27.0	--	--	--	--	--	--	--	
0793	0002	3	1	CAPRA	SCAP	ND	4	R	?	?		24.0	--	--	--	--	--	--	--	--	--	--	--	
1939	0031	3	1	CAPRA	SCAP	ND	4	L	?	?		--	29.0	24.2	--	--	--	--	--	--	--	--	--	
1937	0024	3	1	CAPRA	SCAP	ND	1	L	?	?		18.9	--	--	--	25.7	--	--	--	--	--	--	--	
1936	0010	3	1	CAPRA	SCAP	ND	1	L	?	8		26.3	--	E 30.0	E 27.0	32.5	--	--	--	--	--	--	--	
0193	0006	3	1	CAPRA	SCAP	ND	4	R	?	?		18.5	29.3	23.0	E 18.9	E 20.1	--	--	--	--	--	--	--	
0191	0004	3	1	CAPRA	SCAP	ND	4	R	?	8		19.3	--	24.2	20.7	25.5	--	--	--	--	--	--	--	
2303	0005	3	1	CAPRA	SCAP	ND	3	L	?	?		--	30.3	24.6	10.4	--	--	--	--	--	--	--	--	
0200	0008	3	1	CAPRA	SCAP	ND	1	R	?	8		25.0	37.4	32.0	28.0	E 31.0	--	--	--	--	--	--	--	
0196	0010	3	1	CAPRA	SCAP	ND	1	L	?	?		18.3	--	--	E 20.7	22.6	--	--	--	--	--	--	--	
2302	0003	3	1	CAPRA	SCAP	ND	4	L	?	?		--	26.5	--	E 18.0	--	--	--	--	--	--	--	--	
2113	0017	3	1	CAPRA	SCAP	ND	3	R	?	?		--	32.3	25.2	22.0	--	--	--	--	--	--	--	--	
2308	0052	3	1	CAPRA	SCAP	ND	4	R	?	?		18.3	--	--	--	--	--	--	--	--	--	--	--	
2115	0029	3	1	CAPRA	SCAP	ND	4	R	?	8		24.0	34.3	28.4	25.3	--	--	--	--	--	--	--	--	
0885	0004	3	1	CAPRA	SCAP	ND	3	L	?	8		18.3	27.5	22.5	18.0	19.5	--	--	--	--	--	--	--	
0180	0053	3	1	CAPRA	SCAP	ND	4	R	?	?	7	18.1	28.3	23.1	20.0	26.0	--	--	--	--	--	--	--	
0180	0054	3	1	CAPRA	SCAP	ND	4	R	?	?	8	16.8	20.0	21.6	16.8	19.5	--	--	--	--	--	--	--	
1313	0016	3	1	CAPRA	HUMER	ND	4	R	?M	8		33.3	31.5	--	--	--	--	--	--	--	--	--	--	
0517	0006	3	1	CAPRA	HUMER	ND	1	R	?	8		37.0	35.4	--	--	--	--	--	--	--	--	--	--	
3724	0040	3	1	CAPRA	HUMER	ND	1	R	?	8		31.2	29.8	--	--	--	--	--	--	--	--	--	--	
3715	0023	3	1	CAPRA	HUMER	ND	1	R	?	8		28.8	26.9	--	--	--	--	--	--	--	--	--	--	
3706	0012	3	1	CAPRA	HUMER	ND	1	R	?	8		E 32.5	E 31.0	--	--	--	--	--	--	--	--	--	--	
3706	0013	3	1	CAPRA	HUMER	ND	1	R	?	8		E 28.5	E 27.5	15.7	--	--	--	--	--	--	--	--	--	
0551	0004	3	1	CAPRA	HUMER	ND	4	R	?	8		E 33.0	E 31.2	--	--	--	--	--	--	--	--	--	--	
0551	0002	3	1	CAPRA	HUMER	ND	4	L	?	A		--	--	--	--	37.8	--	--	--	--	--	--	--	
0550	0006	3	1	CAPRA	HUMER	ND	4	R	?	?		29.3	27.6	--	--	--	--	--	--	--	--	--	--	
0534	0007	3	1	CAPRA	HUMER	ND	1	L	?	8		30.4	29.1	--	--	--	--	--	--	--	--	--	--	
0468	0002	3	1	CAPRA	HUMER	ND	1	R	?	?		--	27.2	--	--	--	--	--	--	--	--	--	--	
0399	0022	3	1	CAPRA	HUMER	ND	1	R	?	8		31.0	29.8	15.3	--	--	--	--	--	--	--	--	--	
0309	0012	3	1	CAPRA	HUMER	ND	1	L	?	?		--	29.0	--	--	--	--	--	--	--	--	--	--	
0308	0004	3	1	CAPRA	HUMER	ND	1	R	?	A		--	--	--	36.5	41.6	--	--	--	--	--	--	--	
0305	0006	3	1	CAPRA	HUMER	ND	1	R	?	8		27.5	25.8	--	--	--	--	--	--	--	--	--	--	
0302	0008	3	1	CAPRA	HUMER	ND	3	L	?	?		--	28.8	--	--	--	--	--	--	--	--	--	--	
0296	0005	3	1	CAPRA	HUMER	ND	4	L	?	8		--	--	15.5	--	--	--	--	--	--	--	--	--	
0280	0017	3	1	CAPRA	HUMER	ND	1	R	?	S		28.0	26.0	U 13.4	--	--	--	--	126.7	--	--	--	--	
0279	0011	3	1	CAPRA	HUMER	ND	1	L	?	8		35.4	33.3	--	--	--	--	--	--	--	--	--	--	
0306	0004	3	1	CAPRA	HUMER	ND	1	L	?	6		29.6	28.4	12.9	--	U 40.2	U130.9	--	--	--	--	--	--	
3766	0004	3	1	CAPRA	HUMER	ND	1	L	?	?		29.1	27.1	--	--	--	--	--	--	--	--	--	--	
3766	0001	3	1	CAPRA	HUMER	ND	1	L	?	?		29.6	27.7	E 14.0	--	--	--	--	--	--	--	--	--	
3766	0003	3	1	CAPRA	HUMER	ND	1	L	?	?		32.3	30.1	--	--	--	--	--	--	--	--	--	--	
3763	0020	3	1	CAPRA	HUMER	ND	1	R	?	?		29.3	27.7	--	--	--	--	--	--	--	--	--	--	
3761	0011	3	1	CAPRA	HUMER	ND	4	L	?	8		29.7	29.0	--	--	--	--	--	--	--	--	--	--	
3759	0005	3	1	CAPRA	HUMER	ND	1	L	?	8		33.1	31.9	E 17.5	--	--	--	--	--	--	--	--	--	
3750	0044	3	1	CAPRA	HUMER	ND	1	L	?	S		29.5	27.3	--	--	--	--	--	--	--	--	--	--	
3750	0045	3	1	CAPRA	HUMER	ND	1	L	?	J		31.8	--	E 14.0	--	--	--	--	--	--	--	--	--	
3746	0002	3	1	CAPRA	HUMER	ND	1	L	?	A		--	--	--	E 33.0	40.0	--	--	--	--	--	--	--	
3746	0001	3	1	CAPRA	HUMER	ND	1	R	?	8		30.5	28.3	16.0	--	--	--	--	--	--	--	--	--	
3738	0011	3	1	CAPRA	HUMER	ND	3	R	?	?		--	--	15.4	--	--	--	--	--	--	--	--	--	
3734	0009	3	1	CAPRA	HUMER	ND	1	R	?	A		--	--	--	--	40.3	--	--	--	--	--	--	--	
3722	0001	3	1	CAPRA	HUMER	ND	1	R	?	8		30.3	28.3	--	--	--	--	--	--	--	--	--	--	
3711	0028	3	1	CAPRA	HUMER	ND	4	R	?	A		--	--	--	--	38.3	--	--	--	--	--	--	--	
3711	0027	3	1	CAPRA	HUMER	ND	1	R	?	8		30.0	27.9	14.5	--	--	--	--	--	--	--	--	--	
3710	0001	3	1	CAPRA	HUMER	ND	1	R	?	S		29.5	27.5	15.0	--	--	--	--	--	--	--	--	--	
3704	0035	3	1	CAPRA	HUMER	ND	1	R	?	S		--	29.7	--	--	--	--	--	--	--	--	--	--	
3704	0036	3	1	CAPRA	HUMER	ND	1	L	?	S		29.7	28.5	--	--	--	--	--	--	--	--	--	--	
1302	0002	3	1	CAPRA	HUMER	ND	1	L	?	6		28.4	27.4	--	--	--	--	--	--	--	--	--	--	
0469	0002	3	1	CAPRA	HUMER	ND	1	L	?	8		31.8	30.2	--	--	--	--	--	--	--	--	--	--	
0286	0014	3	1	CAPRA	HUMER	ND	1	R	?	4		E 26.8	26.1	12.4	--	--	--	--	--	--	--	--	--	
0286	0015	3	1	CAPRA	HUMER	ND	1	R	?	8		32.0	29.0	--	--	--	--	--	--	--	--	--	--	
0863	0002	3	1	CAPRA	HUMER	ND	1	L	?	8		28.9	28.0	--	--	--	--	--	--	--	--	--	--	
1901	0013	3	1	CAPRA	HUMER	ND	1	R	?	?		28.5	26.9	--	--	--	--	--	--	--	--	--	--	
1338	0007	3	1	CAPRA	HUMER	ND	3	L	?	?		E 27.5	E 26.6	--	--	--	--	--	--	--	--	--	--	
1336	0005	3	1	CAPRA	HUMER	ND	1	L	?	A		--	--	--	E 33.0	39.5	--	--	--	--	--	--	--	
1327	0015	3	1	CAPRA	HUMER	ND	1	L	?	8		--	E 16.5	--	--	--	--	--	--	--	--	--	--	
1329	0013	3	1	CAPRA	HUMER	ND	4	R	?	?		E 27.7	E 26.1	--	--	--	--	--	--	--	--	--	--	
1348	0005	3	1	CAPRA	HUMER	ND	4	R	?	8		E 27.7	--	--	--	--	--	--	--	--	--	--	--	

MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

KEY IDENTIFICATION CHARAC. MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

LOC	BON	F	M	ANM	ELM	DOM	C	S	SX	A	B	C M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
0756	0001	3	1	CAPRA	HUMER	ND	1	L	?	8		--	32.0	--	--	--	--	--	--	--	--	--	--	
0314	0005	3	1	CAPRA	HUMER	ND	4	R	?	6		28.6	27.2	--	--	--	--	--	--	--	--	--	--	
0761	0007	3	1	CAPRA	HUMER	ND	1	R	?	8		30.1	27.3	16.4	--	--	--	--	--	--	--	--	--	
1916	0045	3	1	CAPRA	HUMER	ND	1	R	?	8		33.0	29.2	--	--	--	--	--	--	--	--	--	--	
1350	0009	3	1	CAPRA	HUMER	ND	1	R	?	?		28.7	26.9	--	--	--	--	--	--	--	--	--	--	
0709	0008	3	1	CAPRA	HUMER	ND	1	L	?	?		31.7	30.3	--	--	--	--	--	--	--	--	--	--	
1923	0024	3	1	CAPRA	HUMER	ND	1	L	?	8		--	32.5	--	--	--	--	--	--	--	--	--	--	
0171	0053	3	1	CAPRA	HUMER	ND	3	R	?	?	4	28.9	27.1	--	--	--	--	--	--	--	--	--	--	
0159	0293	3	1	CAPRA	HUMER	ND	1	M	?	8		28.5	27.2	--	--	--	--	--	--	--	--	--	--	
0159	0052	3	1	CAPRA	HUMER	ND	1	L	?	8		--	32.0	--	--	--	--	--	--	--	--	--	--	
1930	0066	3	1	CAPRA	HUMER	ND	1	R	?	8		29.5	27.5	--	--	--	--	--	--	--	--	--	--	
1925	0002	3	1	CAPRA	HUMER	ND	1	L	?	A		36.2	33.5	--	--	--	--	--	--	--	--	--	--	
0785	0027	3	1	CAPRA	HUMER	ND	1	L	?	?		28.2	27.4	E 16.5	--	--	--	--	--	--	--	--	--	
1933	0102	3	1	CAPRA	HUMER	ND	1	L	?	8		E 37.0	E 34.1	--	--	--	--	--	--	--	--	--	--	
0175	0012	3	1	CAPRA	HUMER	ND	1	L	?	?		27.9	26.8	--	--	--	--	--	--	--	--	--	--	
0165	0015	3	1	CAPRA	HUMER	ND	1	R	?	?		28.4	E 27.5	--	--	--	--	--	--	--	--	--	--	
1939	0007	3	1	CAPRA	HUMER	ND	1	L	?	?		31.5	28.3	--	--	--	--	--	--	--	--	--	--	
1936	0015	3	1	CAPRA	HUMER	ND	1	L	?	?		--	26.8	--	--	--	--	--	--	--	--	--	--	
1937	0003	3	1	CAPRA	HUMER	ND	1	L	?	?		27.6	26.8	--	--	--	--	--	--	--	--	--	--	
0194	0005	3	1	CAPRA	HUMER	ND	4	L	?	J		E 30.7	29.6	--	--	--	--	--	--	--	--	--	--	
0182	0006	3	1	CAPRA	HUMER	ND	4	L	?	8		30.0	28.7	--	--	--	--	--	--	--	--	--	--	
0197	0020	3	1	CAPRA	HUMER	ND	1	L	?	8		28.7	28.1	--	--	--	--	--	--	--	--	--	--	
0194	0006	3	1	CAPRA	HUMER	ND	3	R	?	?		29.1	27.6	--	--	--	--	--	--	--	--	--	--	
2302	0001	3	1	CAPRA	HUMER	ND	4	L	?	8		--	33.3	--	--	--	--	--	--	--	--	--	--	
2108	0034	3	1	CAPRA	HUMER	ND	1	R	?	8		28.0	28.0	--	--	--	--	--	--	--	--	--	--	
2307	0062	3	1	CAPRA	HUMER	ND	1	L	?	J		--	23.9	--	--	--	--	--	--	--	--	--	--	
0885	0002	3	1	CAPRA	HUMER	ND	1	R	?	?	6	29.0	28.0	--	--	--	--	--	--	--	--	--	--	
0885	0003	3	1	CAPRA	HUMER	ND	1	R	?	?		28.5	27.0	--	--	--	--	--	--	--	--	--	--	
0880	0004	3	1	CAPRA	HUMER	ND	1	R	?	?		29.5	28.4	--	--	--	--	--	--	--	--	--	--	
2117	0011	3	1	CAPRA	HUMER	ND	1	R	?	6		28.5	27.1	--	--	--	--	--	--	--	--	--	--	
2127	0004	3	1	CAPRA	HUMER	ND	1	R	?	8		33.1	32.3	--	--	--	--	--	--	--	--	--	--	
1313	0013	3	1	CAPRA	RAD	ND	4	R	?	?		32.5	31.0	--	--	--	--	--	--	--	--	--	--	
0775	0003	3	1	CAPRA	RAD	ND	1	R	?	S		27.5	26.3	16.2	--	--	--	--	--	--	--	--	--	
3768	0009	3	1	CAPRA	RAD	ND	1	L	?	A		--	--	16.8	27.3	24.7	--	--	--	--	--	--	--	
0517	0009	3	1	CAPRA	RAD	ND	1	R	?	8		27.6	25.9	15.9	--	-	--	--	--	--	--	--	--	
3724	0048	3	1	CAPRA	RAD	ND	1	R	?	8		33.6	31.8	--	--	--	--	--	--	--	--	--	--	
3718	0018	3	1	CAPRA	RAD	ND	1	L	?	A		35.0	33.5	--	--	--	--	--	--	--	--	--	--	
3706	0014	3	1	CAPRA	RAD	ND	1	R	?	A		--	--	17.6	26.6	23.5	--	--	--	--	--	--	--	
0549	0002	3	1	CAPRA	RAD	ND	1	L	?	8		29.5	27.8	--	--	--	--	--	--	--	--	--	--	
0547	0001	3	1	CAPRA	RAD	ND	4	L	?	6		28.2	27.4	15.6	--	--	--	123.7	--	--	--	--	--	
0468	0004	3	1	CAPRA	RAD	ND	1	L	?	A		--	--	--	26.0	23.7	--	--	--	--	--	--	--	
0360	0003	3	1	CAPRA	RAD	ND	1	L	?	8		30.0	27.8	--	--	--	--	--	--	--	--	--	--	
0309	0019	3	1	CAPRA	RAD	ND	1	R	?	8		30.1	28.4	--	--	--	--	--	--	--	--	--	--	
0302	0013	3	1	CAPRA	RAD	ND	1	R	?	S		--	--	--	U 30.8	U 28.8	--	--	--	--	--	--	--	
0296	0008	3	1	CAPRA	RAD	ND	1	R	?	A		--	--	17.1	28.3	25.6	--	--	--	--	--	--	--	
0293	0006	3	1	CAPRA	RAD	ND	1	L	?	8		28.2	27.1	--	--	--	--	--	--	--	--	--	--	
0293	0008	3	1	CAPRA	RAD	ND	1	R	?	Y		--	--	--	U 26.7	U 24.6	--	--	--	--	--	--	--	
0279	0023	3	1	CAPRA	RAD	ND	1	R	?	4		26.2	25.4	13.6	U 24.5	U 23.3	U128.0	--	--	--	--	--	--	
0279	0028	3	1	CAPRA	RAD	ND	1	R	?	S		31.1	29.7	18.2	U 29.6	U 26.9	U154.5	--	--	--	--	--	--	
0306	0005	3	1	CAPRA	RAD	ND	1	L	?	6		E 27.5	E 26.5	15.9	U 27.8	U 26.2	U146.2	--	--	--	--	--	--	
3764	0076	3	1	CAPRA	RAD	ND	1	R	?	S		--	--	--	26.6	E 25.5	--	--	--	--	--	--	--	
3763	0032	3	1	CAPRA	RAD	ND	1	L	?	A		--	--	--	28.5	26.1	--	--	--	--	--	--	--	
3761	0005	3	1	CAPRA	RAD	ND	1	L	?	A		--	--	E 18.0	29.0	25.0	--	--	--	--	--	--	--	
3761	0004	3	1	CAPRA	RAD	ND	1	R	?	A		--	--	E 16.5	27.8	24.5	--	--	--	--	--	--	--	
3757	0001	3	1	CAPRA	RAD	ND	1	R	?	8		34.7	32.6	--	--	--	--	--	--	--	--	--	--	
3752	0027	3	1	CAPRA	RAD	ND	1	L	?	A		--	--	E 17.5	27.5	25.5	--	--	--	--	--	--	--	
3746	0005	3	1	CAPRA	RAD	ND	1	L	?	A		--	--	18.2	29.4	26.7	--	--	--	--	--	--	--	
3745	0007	3	1	CAPRA	RAD	ND	1	L	?	A		--	--	--	36.3	31.2	--	--	--	--	--	--	--	
3745	0009	3	1	CAPRA	RAD	ND	4	R	?	?		--	--	16.0	--	--	--	--	--	--	--	--	--	
3738	0015	3	1	CAPRA	RAD	ND	3	L	?	8		--	--	22.8	--	--	--	--	--	--	--	--	--	
3736	0018	3	1	CAPRA	RAD	ND	1	L	?	?		27.5	26.4	--	--	--	--	--	--	--	--	--	--	
3732	0019	3	1	CAPRA	RAD	ND	1	R	?	A		31.0	29.5	20.0	--	--	--	--	--	--	--	--	--	
3732	0017	3	1	CAPRA	RAD	ND	1	L	?	A		37.0	35.0	22.5	--	--	--	--	--	--	--	--	--	
3722	0007	3	1	CAPRA	RAD	ND	1	R	?	8		29.0	28.3	--	--	--	--	--	--	--	--	--	--	
3721	0003	3	1	CAPRA	RAD	ND	1	R	?	S		--	--	--	U 26.9	U 24.0	--	--	--	--	--	--	--	
3711	0029	3	1	CAPRA	RAD	ND	1	R	?	?		29.2	27.8	E 16.5	--	--	--	--	--	--	--	--	--	
3711	0030	3	1	CAPRA	RAD	ND	1	L	?	A		37.0	34.2	--	--	--	--	--	--	--	--	--	--	
3710	0005	3	1	CAPRA	RAD	ND	1	R	?	8		29.3	27.5	--	--	--	--	--	--	--	--	--	--	
3710	0007	3	1	CAPRA	RAD	ND	1	R	?	A		28.3	26.7	17.0	28.6	24.4	--	--	--	--	--	--	--	
1908	0004	3	1	CAPRA	RAD	ND	1	R	?	?	7	28.1	27.0	--	--	--	--	--	--	--	--	--	--	
1338	0003	3	1	CAPRA	RAD	ND	1	L	?	A		--	--	--	36.6	32.8	--	--	--	--	--	--	--	
1322	0001	3	1	CAPRA	RAD	ND	1	R	?	8		29.8	28.9	--	--	--	--	--	--	--	--	--	--	
1352	0003	3	1	CAPRA	RAD	ND	1	R	?	8		28.7	27.0	--	--	--	--	--	--	--	--	--	--	
1912	0007	3	1	CAPRA	RAD	ND	1	L	?	Y		--	--	--	--	U 28.0	--	--	--	--	--	--	--	
1371	0005	3	1	CAPRA	RAD	ND	3	L	?M	A		--	--	23.0	--	--	--	--	--	--	--	--	--	
0758	0001	3	1	CAPRA	RAD	ND	1	R	?	A		--	--	17.4	27.8	25.6	--	--	--	--	--	--	--	
0846	0002	3	1	CAPRA	RAD	ND	1	L	?	J		30.2	29.4	19.4	--	--	--	--	--	--	--	--	--	
1916	0060	3	1	CAPRA	RAD	ND	1	R	?	A		--	--	--	27.7	24.0	--	--	--	--	--	--	--	
1924	0005	3	1	CAPRA	RAD	ND	1	L	?	A		--	--	--	28.0	26.3	--	--	--	--	--	--	--	
1916	0059	3	1	CAPRA	RAD	ND	1	L	?	A		--	--	--	--	24.8	--	--	--	--	--	--	--	
1915	0063	3	1	CAPRA	RAD	ND	1	R	?	8		27.7	26.5	--	--	--	--	--	--	--	--	--	--	
0171	0077	3	1	CAPRA	RAD	ND	4	R	?	8		29.0	--	--	--	--	--	--	--	--	--	--	--	
0171	0078	3	1	CAPRA	RAD	ND	1	R	?	8		28.9	27.6	--	--	--	--	--	--	--	--	--	--	
0159	0076	3	1	CAPRA	RAD	ND	1	L	?	S		--	--	--	32.0	28.6	--	--	--	--	--	--	--	
0159	0056	3	1	CAPRA	RAD	ND	1	R	?	A		--	--	--	E 35.0	30.5	--	--	--	--	--	--	--	
1930	0053	3	1	CAPRA	RAD	ND	1	R	?	A		38.0	35.5	--	--	--	--	--	--	--	--	--	--	
1930	0051	3	1	CAPRA	RAD	ND	1	L	?	A		--	--	--	E 33.5	30.0	--	--	--	--	--	--	--	
0785	0029	3	1	CAPRA	RAD	ND	1	L	?	?		20.2	18.8	--	--	--	--	--	--	--	--	--	--	
1933	0053	3	1	CAPRA	RAD	ND	1	R	?	J		30.3	29.2	--	--	--	--	--	--	--	--	--	--	
0165	0011	3	1	CAPRA	RAD	ND	1	L	?	A		--	--	--	26.5	25.0	--	--	--	--	--	--	--	
1376	0009	3	1	CAPRA	RAD	ND	1	L	?	8		30.6	29.1	--	--	--	--	--	--	--	--	--	--	
0822	0009	3	1	CAPRA	RAD	ND	1	R	?	8		30.0	29.0	--	--	--	--	--	--	--	--	--	--	
1940	0009	3	1	CAPRA	RAD	ND	1	R	?	J		29.9	29.2	--	--	--	--	--	--	--	--	--	--	
1938	0006	3	1	CAPRA	RAD	ND	1	L	?	A		35.3	33.9	--	--	--	--	--	--	--	--	--	--	
1935	0016	3	1	CAPRA	RAD	ND	1	R	?	A	3	--	--	--	27.5	25.5	--	--	--	--	--	--	--	
0196	0014	3	1	CAPRA	RAD	ND	1	L	?	6		--	--	--	25.4	24.5	--	--	--	--	--	--	--	
2113	0019	3	1	CAPRA	RAD	ND	1	R	?	8		29.5	28.2	17.0	--	--	--	--	--	--	--	--	--	
2108	0038	3	1	CAPRA	RAD	ND	4	L	?	A		E 34.5	E 32.0	--	--	--	--	--	--	--	--	--	--	
2108	0042	3	1	CAPRA	RAD	ND	4	R	?	4		25.7	25.2	13.1	--	--	--	--	--	--	--	--	--	
1941	0045	3	1	CAPRA	RAD	ND	1	L	?	8		35.6	32.6	--	--	--	--	--	--	--	--	--	--	

KEY / IDENTIFICATION / CHARAC. MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

LOC	BON	F	M	ANM	ELM	DOM	C	S	SX	A	B	C M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
0883	0004	3	1	CAPRA	RAD	ND	1	L	?	?		26.6	26.0	--	--	--	--	--	--	--	--	--	--	
0002	0010	3	1	CAPRA	RAD	ND	1	R	?	?		27.8	26.8	--	--	--	--	--	--	--	--	--	--	
2117	0009	3	1	CAPRA	RAD	ND	1	R	?	6		27.5	26.0	16.1	--	--	--	124.0	--	--	--	--	--	
1313	0014	3	1	CAPRA	ULNA	ND	4	R	?	?		21.7	27.0	--	--	--	--	--	--	--	--	--	--	
3724	0057	3	1	CAPRA	ULNA	ND	3	R	?	?		21.5	--	--	--	--	--	--	--	--	--	--	--	
0549	0003	3	1	CAPRA	ULNA	ND	1	L	?	8		E 20.3	--	--	--	--	--	--	--	--	--	--	--	
0360	0004	3	1	CAPRA	ULNA	ND	1	L	?	8		21.6	25.6	20.8	--	--	--	--	--	--	--	--	--	
0293	0007	3	1	CAPRA	ULNA	ND	1	L	?	8		19.7	22.7	19.0	--	--	--	--	--	--	--	--	--	
0279	0024	3	1	CAPRA	ULNA	ND	1	R	?	4		18.3	21.2	--	--	--	--	--	--	--	--	--	--	
3736	0019	3	1	CAPRA	ULNA	ND	1	R	?	6		--	27.9	24.5	--	--	--	--	--	--	--	--	--	
3732	0020	3	1	CAPRA	ULNA	ND	1	R	?	A		22.0	--	--	--	--	--	--	--	--	--	--	--	
3732	0018	3	1	CAPRA	ULNA	ND	1	L	?	A		24.4	--	--	--	--	--	--	--	--	--	--	--	
3722	0008	3	1	CAPRA	ULNA	ND	1	R	?	8		22.0	22.7	20.0	--	--	--	--	--	--	--	--	--	
3711	0031	3	1	CAPRA	ULNA	ND	1	L	?	A		26.5	--	--	--	--	--	--	--	--	--	--	--	
3710	0006	3	1	CAPRA	ULNA	ND	1	R	?	8		20.5	23.7	20.0	--	--	--	--	--	--	--	--	--	
3710	0008	3	1	CAPRA	ULNA	ND	1	R	?	A		21.4	23.7	19.6	--	--	--	--	--	--	--	--	--	
1331	0004	3	1	CAPRA	ULNA	ND	3	L	?	Y		20.6	--	--	--	--	--	--	--	--	--	--	--	
1334	0015	3	1	CAPRA	ULNA	ND	4	L	?	?		22.1	E 24.5	--	--	--	--	--	--	--	--	--	--	
1331	0002	3	1	CAPRA	ULNA	ND	3	L	?	?		E 16.9	25.6	--	--	--	--	--	--	--	--	--	--	
1322	0002	3	1	CAPRA	ULNA	ND	1	R	?	8		21.0	--	--	--	--	--	--	--	--	--	--	--	
1352	0004	3	1	CAPRA	ULNA	ND	1	R	?	8		18.2	22.8	19.5	--	--	--	--	--	--	--	--	--	
1352	0005	3	1	CAPRA	ULNA	ND	3	L	?	?		E 23.9	--	--	--	--	--	--	--	--	--	--	--	
0846	0001	3	1	CAPRA	ULNA	ND	1	L	?	J		E 22.5	27.3	24.2	--	--	--	--	--	--	--	--	--	
1930	0054	3	1	CAPRA	ULNA	ND	1	R	?	A		28.0	--	--	--	--	--	--	--	--	--	--	--	
0705	0030	3	1	CAPRA	ULNA	ND	1	L	?	?		20.8	--	--	--	--	--	--	--	--	--	--	--	
1933	0054	3	1	CAPRA	ULNA	ND	1	R	?	J		21.0	--	--	--	--	--	--	--	--	--	--	--	
1376	0010	3	1	CAPRA	ULNA	ND	1	L	?	8		20.5	25.2	--	--	--	--	--	--	--	--	--	--	
2108	0039	3	1	CAPRA	ULNA	ND	4	L	?	A		24.0	33.0	--	--	--	--	--	--	--	--	--	--	
2309	0074	3	1	CAPRA	ULNA	ND	4	L	?	Y		15.7	U 21.5	U 18.1	--	--	--	--	--	--	--	--	--	
1941	0046	3	1	CAPRA	ULNA	ND	1	L	?	8		25.2	E 30.0	25.8	--	--	--	--	--	--	--	--	--	
0881	0011	3	1	CAPRA	ULNA	ND	1	R	?	?		18.3	--	--	--	--	--	--	--	--	--	--	--	
3715	0033	3	1	CAPRA	MC3+4	ND	1	R	?	8		--	--	--	--	--	E 97.0	--	--	--	--	--	--	
0542	0007	3	1	CAPRA	MC3+4	ND	1	L	?	8		--	--	--	24.3	14.3	--	--	--	--	--	--	--	
0537	0011	3	1	CAPRA	MC3+4	ND	1	L	?	8		22.2	15.0	13.9	25.8	15.7	98.3	--	--	--	--	8.9	--	
0279	0029	3	1	CAPRA	MC3+4	ND	1	L	?	4		19.7	13.8	11.9	U 23.4	U 13.6	U 90.8	--	--	--	--	--	--	
3761	0017	3	1	CAPRA	MC3+4	ND	1	L	?	5		--	--	12.9	24.2	14.5	E 93.5	--	--	--	--	8.7	--	
3745	0019	3	1	CAPRA	MC3+4	ND	3	L	?	8		E 21.0	E 13.5	13.5	--	--	--	--	--	--	--	--	--	
1904	0001	3	1	CAPRA	MC3+4	ND	1	R	?	8		--	--	--	F 27.5	15.0	--	--	--	--	--	--	--	
1913	0003	3	1	CAPRA	MC3+4	ND	1	R	?	8		--	--	14.4	26.2	15.3	E 99.5	--	--	--	--	9.2	--	
1914	0013	3	1	CAPRA	MC3+4	ND	1	R	?	8		--	--	--	E 25.0	14.5	--	--	--	--	--	--	--	
0171	0062	3	1	CAPRA	MC3+4	ND	1	R	?	8	1	--	--	--	E 24.5	14.5	--	--	--	--	--	--	--	
2113	0004	3	1	CAPRA	MC3+4	ND	3	R	?	8		22.4	16.1	13.5	--	--	--	--	--	--	--	--	--	
2307	0055	3	1	CAPRA	MC3+4	ND	1	R	?	Y		--	--	--	U 26.0	U 14.7	--	--	--	--	--	--	--	
0883	0001	3	1	CAPRA	MC3+4	ND	1	R	?	8		22.5	15.3	14.0	25.5	14.7	98.3	--	--	--	--	8.3	--	
3758	0001	3	1	CAPRA	PELV	ND	1	L	F	8		25.0	24.3	--	--	--	--	--	--	--	--	--	--	
3710	0021	3	1	CAPRA	PELV	ND	4	L	F	8		23.0	21.5	--	--	--	--	--	--	--	--	--	--	
1314	0005	3	1	CAPRA	PELV	ND	1	R	F	8		25.2	22.4	E172.5	179.2	--	--	--	--	--	--	--	--	
1932	0092	3	1	CAPRA	PELV	ND	1	R	M	8		--	25.5	--	--	--	--	--	--	--	--	--	--	
2102	0044	3	1	CAPRA	PELV	ND	1	R	F	8		25.1	21.0	--	--	--	--	--	--	--	--	--	--	
2308	0062	3	1	CAPRA	PELV	ND	1	L	M	?		30.8	26.0	--	--	--	--	--	--	--	--	--	--	
2112	0021	3	1	CAPRA	PELV	ND	1	L	F	8		25.7	--	--	--	--	--	--	--	--	--	--	--	
2112	0022	3	1	CAPRA	PELV	ND	1	R	F	8		26.0	21.6	--	--	--	--	--	--	--	--	--	--	
0409	0008	3	1	CAPRA	IL/IS	ND	1	L	F	8		25.2	--	--	--	--	--	--	--	--	--	--	--	
0282	0010	3	1	CAPRA	IL/IS	ND	1	L	?	8		25.0	--	--	--	--	--	--	--	--	--	--	--	
0282	0009	3	1	CAPRA	IL/IS	ND	1	R	F	8		24.0	--	--	--	--	--	--	--	--	--	--	--	
3722	0009	3	1	CAPRA	IL/IS	ND	1	L	F	8		25.0	--	--	--	--	12.1	6.5	--	--	--	--	--	
0851	0009	3	1	CAPRA	IL/IS	ND	1	R	M	?		26.6	--	--	--	--	16.4	7.0	--	--	--	--	--	
0159	0132	3	1	CAPRA	IL/IS	ND	1	L	F	8		24.8	--	--	--	--	--	--	--	--	--	--	--	
0166	0002	3	1	CAPRA	IL/IS	ND	1	R	F	8		26.4	--	--	--	--	--	--	--	--	--	--	--	
0207	0009	3	1	CAPRA	IL/IS	ND	1	R	F	?		23.8	--	--	--	--	--	--	--	--	--	--	--	
3711	0042	3	1	CAPRA	ILIUM	ND	1	R	F	8		--	--	--	--	--	11.2	6.8	--	--	--	--	--	
0325	0015	3	1	CAPRA	FEMUR	ND	1	L	?	8		37.9	19.1	--	--	--	--	--	--	--	--	--	--	
3706	0015	3	1	CAPRA	FEMUR	ND	1	R	?	8		--	20.1	--	--	--	--	--	--	--	--	--	--	
0550	0014	3	1	CAPRA	FEMUR	ND	3	L	?	5		--	--	--	33.4	14.2	--	--	--	--	--	--	--	
0537	0008	3	1	CAPRA	FEMUR	ND	1	L	?	A		--	18.5	--	--	--	--	--	--	--	--	--	--	
0534	0011	3	1	CAPRA	FEMUR	ND	1	R	?	8		39.8	20.2	--	--	--	--	--	--	--	--	--	--	
0534	0012	3	1	CAPRA	FEMUR	ND	1	L	?	8		--	19.2	--	--	--	--	--	--	--	--	--	--	
0409	0006	3	1	CAPRA	FEMUR	ND	1	R	?	8		--	18.1	--	--	--	--	--	--	--	--	--	--	
0301	0005	3	1	CAPRA	FEMUR	ND	1	R	?	8		36.1	18.8	--	--	--	--	--	--	--	--	--	--	
0301	0003	3	1	CAPRA	FEMUR	ND	1	L	?	8		36.0	17.8	--	--	--	--	--	--	--	--	--	--	
0301	0004	3	1	CAPRA	FEMUR	ND	1	R	?	8		36.1	19.0	--	--	--	--	--	--	--	--	--	--	
0280	0007	3	1	CAPRA	FEMUR	ND	1	L	?	5		41.4	20.9	17.0	--	--	--	--	--	--	--	--	--	
0279	0006	3	1	CAPRA	FEMUR	ND	1	R	?	8		39.5	19.2	--	--	--	--	--	--	--	--	--	--	
0279	0007	3	1	CAPRA	FEMUR	ND	1	R	?	8		37.4	17.5	15.8	--	--	--	--	--	--	--	--	--	
0279	0005	3	1	CAPRA	FEMUR	ND	4	L	?	8		42.6	20.6	--	--	--	--	--	--	--	--	--	--	
3765	0068	3	1	CAPRA	FEMUR	ND	4	L	?	8		--	--	--	32.4	14.6	--	--	--	--	--	--	--	
3765	0069	3	1	CAPRA	FEMUR	ND	1	L	?	8		--	17.3	--	--	--	--	--	--	--	--	--	--	
3761	0012	3	1	CAPRA	FEMUR	ND	1	L	?	8		E 39.0	20.5	--	--	--	--	--	--	--	--	--	--	
3753	0056	3	1	CAPRA	FEMUR	ND	1	R	?	8		38.0	19.7	--	--	--	--	--	--	--	--	--	--	
3750	0019	3	1	CAPRA	FEMUR	ND	1	L	?	A		42.1	21.0	--	--	--	--	--	--	--	--	--	--	
3745	0030	3	1	CAPRA	FEMUR	ND	1	R	?	8		39.5	19.4	--	--	--	--	--	--	--	--	--	--	
3713	0015	3	1	CAPRA	FEMUR	ND	1	L	?	8		39.2	19.7	E 15.5	--	--	--	--	--	--	--	--	--	
3704	0052	3	1	CAPRA	FEMUR	ND	4	L	?	8		--	20.7	--	--	--	--	--	--	--	--	--	--	
0555	0018	3	1	CAPRA	FEMUR	ND	1	L	?	8		E 38.0	20.0	--	--	--	--	--	--	--	--	--	--	
0294	0006	3	1	CAPRA	FEMUR	ND	1	L	?	5		42.4	21.9	--	--	--	--	--	--	--	--	--	--	
0286	0019	3	1	CAPRA	FEMUR	ND	1	R	?	A		36.3	18.9	E 15.0	--	--	--	--	--	--	--	--	--	
1908	0021	3	1	CAPRA	FEMUR	ND	1	R	?	8		--	18.1	--	--	--	--	--	--	--	--	--	--	
1316	0004	3	1	CAPRA	FEMUR	ND	1	R	?	8		37.5	19.5	--	--	--	--	--	--	--	--	--	--	
1333	0001	3	1	CAPRA	FEMUR	ND	4	R	?	5		36.2	18.8	14.5	--	--	--	--	--	--	--	--	--	
1344	0001	3	1	CAPRA	FEMUR	ND	4	L	?	8		36.0	18.5	--	--	--	--	--	--	--	--	--	--	
0710	0001	3	1	CAPRA	FEMUR	ND	1	R	?	8		38.2	19.0	E 15.5	--	--	--	--	--	--	--	--	--	
3769	0013	3	1	CAPRA	FEMUR	ND	1	R	?	A		38.2	18.7	16.5	32.8	15.6	161.0	--	--	--	--	--	--	
1916	0044	3	1	CAPRA	FEMUR	ND	4	R	?	8		--	19.2	--	--	--	--	--	--	--	--	--	--	
0159	0129	3	1	CAPRA	FEMUR	ND	4	R	?	8		--	20.2	--	--	--	--	--	--	--	--	--	--	
1932	0015	3	1	CAPRA	FEMUR	ND	4	L	?	8		--	18.5	--	--	--	--	--	--	--	--	--	--	
1931	0014	3	1	CAPRA	FEMUR	ND	4	R	?	8		--	22.0	--	--	--	--	--	--	--	--	--	--	
0212	0011	3	1	CAPRA	FEMUR	ND	4	L	?	8		--	23.4	--	--	--	--	--	--	--	--	--	--	
0206	0020	3	1	CAPRA	FEMUR	ND	4	L	?	8		--	18.4	--	--	--	--	--	--	--	--	--	--	
0191	0003	3	1	CAPRA	FEMUR	ND	1	R	?	8		43.0	19.7	--	--	--	--	--	--	--	--	--	--	
0160	0020	3	1	CAPRA	FEMUR	ND	1	L	?	8		--	18.4	--	--	--	--	--	--	--	--	--	--	

KEY IDENTIFICATION CHARAC. MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

LOC	BON	F	M	ANM	ELM	DOM	C	S	SX	A	B	C M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
0160	0021	3	1	CAPRA	FEMUR	ND	1	?	?	B		--	18.9	--	--	--	--	--	--	--	--	--	--	
3724	0042	3	1	CAPRA	TIBIA	ND	1	L	?	Y		--	--	U 26.0	U 20.0	--	--	--	--	--	--	--	--	
3718	0017	3	1	CAPRA	TIBIA	ND	1	L	?	B		--	16.7	E 27.5	24.3	--	--	--	--	--	--	--	--	
3707	0030	3	1	CAPRA	TIBIA	ND	1	R	?	B		30.1	23.2	--	--	--	--	--	--	--	--	--	--	
3706	0016	3	1	CAPRA	TIBIA	ND	1	L	?	B		--	13.5	25.1	21.0	--	--	--	--	--	--	--	--	
0547	0009	3	1	CAPRA	TIBIA	ND	4	R	?	B		--	14.1	23.2	18.0	--	--	--	--	--	--	--	--	
0547	0008	3	1	CAPRA	TIBIA	ND	4	L	?	S		--	E 12.5	21.8	18.0	--	--	--	--	--	--	--	--	
0542	0004	3	1	CAPRA	TIBIA	ND	1	R	?	B		--	--	24.2	18.9	--	--	--	--	--	--	--	--	
0342	0001	3	1	CAPRA	TIBIA	ND	4	L	?	B		--	--	23.6	18.0	--	--	--	--	--	--	--	--	
0308	0011	3	1	CAPRA	TIBIA	ND	1	R	?	A		41.8	--	--	--	--	--	--	--	38.0	--	--	--	
0308	0012	3	1	CAPRA	TIBIA	ND	1	L	?	B		--	E 12.3	23.2	18.2	--	--	--	--	--	--	--	--	
0302	0023	3	1	CAPRA	TIBIA	ND	1	R	?	B		30.1	12.4	21.7	16.7	--	--	--	--	--	--	--	--	
0296	0011	3	1	CAPRA	TIBIA	ND	1	L	?	A		38.2	--	--	--	--	--	--	--	38.0	--	--	--	
0279	0013	3	1	CAPRA	TIBIA	ND	4	L	?	B		38.8	--	--	--	--	36.3	--	--	--	--	--	--	
0279	0015	3	1	CAPRA	TIBIA	ND	1	R	?	6		--	--	--	25.9	21.5	--	--	--	--	--	--	--	
0279	0012	3	1	CAPRA	TIBIA	ND	4	L	?	B		35.9	--	--	--	--	32.7	--	--	--	--	--	--	
3766	0015	3	1	CAPRA	TIBIA	ND	1	L	?	B		--	--	27.7	21.7	--	--	--	--	--	--	--	--	
3761	0001	3	1	CAPRA	TIBIA	ND	1	R	?	A		--	--	29.2	22.0	--	--	--	--	--	--	--	--	
3761	0002	3	1	CAPRA	TIBIA	ND	1	R	?	B		--	--	23.5	19.5	--	--	--	--	--	--	--	--	
3758	0006	3	1	CAPRA	TIBIA	ND	1	L	?	B		--	13.1	23.0	17.8	--	--	--	--	--	--	--	--	
3758	0005	3	1	CAPRA	TIBIA	ND	1	R	?	B		--	E 13.5	24.3	18.4	--	--	--	--	--	--	--	--	
3750	0030	3	1	CAPRA	TIBIA	ND	1	R	?	A		--	13.0	23.7	18.4	E194.0	--	--	--	E 34.0	--	--	--	
3750	0031	3	1	CAPRA	TIBIA	ND	4	R	?	A		38.1	13.4	--	--	--	--	--	--	37.6	--	--	--	
3750	0028	3	1	CAPRA	TIBIA	ND	4	R	?	A		E 36.0	--	--	--	--	--	--	--	34.8	--	--	--	
3745	0016	3	1	CAPRA	TIBIA	ND	1	R	?	A		E 37.0	--	--	--	--	--	--	--	34.8	--	--	--	
3742	0007	3	1	CAPRA	TIBIA	ND	1	L	?	B		--	13.4	24.9	18.6	--	--	--	--	--	--	--	--	
3738	0006	3	1	CAPRA	TIBIA	ND	1	L	?	B		--	14.5	23.9	19.5	--	--	--	--	--	--	--	--	
3736	0015	3	1	CAPRA	TIBIA	ND	1	R	?	A		38.7	--	--	--	--	--	--	--	37.3	--	--	--	
3734	0003	3	1	CAPRA	TIBIA	ND	1	R	?	A		36.5	--	--	--	--	--	--	--	33.3	--	--	--	
3728	0001	3	1	CAPRA	TIBIA	ND	4	L	?	A		45.0	17.8	--	--	--	--	--	--	46.0	--	--	--	
3712	0018	3	1	CAPRA	TIBIA	ND	1	R	?	A		E 35.0	--	--	--	--	--	--	--	E 30.0	--	--	--	
3711	0026	3	1	CAPRA	TIBIA	ND	1	R	?	B		--	E 15.5	26.5	22.0	--	--	--	--	--	--	--	--	
3704	0055	3	1	CAPRA	TIBIA	ND	1	L	?	B		--	13.6	25.1	19.2	--	--	--	--	--	--	--	--	
0555	0014	3	1	CAPRA	TIBIA	ND	1	R	?	B		--	--	21.5	16.6	--	--	--	--	--	--	--	--	
0467	0015	3	1	CAPRA	TIBIA	ND	1	L	?	B		--	16.1	25.5	E 18.5	--	--	--	--	--	--	--	--	
1363	0003	3	1	CAPRA	TIBIA	ND	1	R	?	B		--	--	E 27.0	E 18.5	--	--	--	--	--	--	--	--	
1906	0003	3	1	CAPRA	TIBIA	ND	4	R	?	B		--	--	25.6	21.3	--	--	--	--	--	--	--	--	
1902	0007	3	1	CAPRA	TIBIA	ND	4	R	?	B		--	--	E 21.0	E 16.0	--	--	--	--	--	--	--	--	
1905	0015	3	1	CAPRA	TIBIA	ND	4	L	?	B	7	--	--	23.0	19.5	--	--	--	--	--	--	--	--	
1337	0002	3	1	CAPRA	TIBIA	ND	4	L	?	B		--	12.2	E 21.1	E 17.4	--	--	--	--	--	--	--	--	
1321	0003	3	1	CAPRA	TIBIA	ND	1	R	?	B		--	--	23.3	18.2	--	--	--	--	--	--	--	--	
0310	0008	3	1	CAPRA	TIBIA	ND	1	L	?	B		--	13.3	23.8	18.5	--	--	--	--	--	--	--	--	
1327	0011	3	1	CAPRA	TIBIA	ND	1	R	?	B		--	--	24.2	17.9	--	--	--	--	--	--	--	--	
0314	0009	3	1	CAPRA	TIBIA	ND	1	R	?	B		--	--	E 23.0	19.0	--	--	--	--	--	--	--	--	
3769	0005	3	1	CAPRA	TIBIA	ND	1	R	?	J		--	--	U 27.1	U 21.1	--	--	--	--	--	--	--	--	
3769	0009	3	1	CAPRA	TIBIA	ND	1	R	?	B		--	13.7	23.2	20.0	--	--	--	--	--	--	--	--	
1915	0059	3	1	CAPRA	TIBIA	ND	1	L	?	B		--	12.9	22.4	17.8	--	--	--	--	--	--	--	--	
1915	0055	3	1	CAPRA	TIBIA	ND	4	L	?	B		--	--	25.7	--	--	--	--	--	--	--	--	--	
0731	0015	3	1	CAPRA	TIBIA	ND	1	L	?	B		--	--	27.1	23.1	--	--	--	--	--	--	--	--	
0159	0107	3	1	CAPRA	TIBIA	ND	1	R	?	A		--	--	32.1	23.5	--	--	--	--	--	--	--	--	
1932	0090	3	1	CAPRA	TIBIA	ND	1	R	?	A		38.0	--	--	--	--	--	--	--	--	--	--	--	
1932	0090	3	1	CAPRA	TIBIA	ND	1	R	?	A		38.0	--	--	--	--	--	--	--	--	--	--	--	
0766	0009	3	1	CAPRA	TIBIA	ND	1	L	?	B		--	12.6	23.6	18.3	--	--	--	--	--	--	--	--	
1938	0008	3	1	CAPRA	TIBIA	ND	1	L	?	B		--	--	E 30.0	23.3	--	--	--	--	--	--	--	--	
1936	0024	3	1	CAPRA	TIBIA	ND	1	R	?	J		--	--	23.0	18.2	--	--	--	--	--	--	--	--	
0192	0004	3	1	CAPRA	TIBIA	ND	1	R	?	B		--	--	22.8	18.2	--	--	--	--	--	--	--	--	
0193	0002	3	1	CAPRA	TIBIA	ND	1	L	?	B		--	--	23.5	18.5	--	--	--	--	--	--	--	--	
0214	0025	3	1	CAPRA	TIBIA	ND	3	L	?	A		36.7	--	--	--	--	--	--	--	37.0	--	--	--	
2309	0095	3	1	CAPRA	TIBIA	ND	1	R	?	B		--	--	24.1	19.7	--	--	--	--	--	--	--	--	
0887	0005	3	1	CAPRA	TIBIA	ND	1	R	?	A		[illegible]3.8	--	--	--	--	--	--	--	--	--	--	--	
2120	0005	3	1	CAPRA	TIBIA	ND	1	R	?	B		--	--	28.6	22.0	--	--	--	--	--	--	--	--	
1311	0001	3	1	CAPRA	TALUS	ND	1	R	?	?		26.1	24.8	14.3	--	16.2	15.5	--	--	--	--	--	--	
0325	0017	3	1	CAPRA	TALUS	ND	1	R	?	?		29.8	27.0	16.0	--	18.3	16.9	--	--	--	--	--	--	
3715	0027	3	1	CAPRA	TALUS	ND	1	L	?	?		26.0	25.1	13.6	--	17.0	15.9	--	--	--	--	--	--	
3715	0028	3	1	CAPRA	TALUS	ND	1	L	?	B		28.2	26.5	15.7	--	18.9	18.0	--	--	--	--	--	--	
3707	0031	3	1	CAPRA	TALUS	ND	1	R	?	?	8	25.6	24.4	13.5	--	16.6	16.1	--	--	--	--	--	--	
0550	0015	3	1	CAPRA	TALUS	ND	1	L	?	?		25.7	24.5	13.0	--	16.9	15.9	--	--	--	--	--	--	
0544	0004	3	1	CAPRA	TALUS	ND	1	L	?	B		E 29.0	26.2	14.9	--	19.0	16.8	--	--	--	--	--	--	
0545	0009	3	1	CAPRA	TALUS	ND	4	R	?	?		25.6	24.6	E 13.3	--	E 15.8	E 14.5	--	--	--	--	--	--	
0542	0005	3	1	CAPRA	TALUS	ND	1	R	?	B		25.9	24.2	13.8	--	17.2	15.4	--	--	--	--	--	--	
0360	0005	3	1	CAPRA	TALUS	ND	4	R	?	?		E 28.5	27.0	14.9	--	17.8	E 18.1	--	--	--	--	--	--	
0309	0027	3	1	CAPRA	TALUS	ND	4	L	?	?		27.1	26.6	14.6	--	E 16.2	E 16.3	--	--	--	--	--	--	
0308	0013	3	1	CAPRA	TALUS	ND	1	L	?	B		26.0	24.8	14.1	--	17.1	16.1	--	--	--	--	--	--	
0279	0017	3	1	CAPRA	TALUS	ND	1	R	?	6		28.6	27.0	15.5	--	17.5	16.3	--	--	--	--	--	--	
3764	0030	3	1	CAPRA	TALUS	ND	4	L	?	?		E 28.0	E 26.5	E 16.0	--	E 17.5	E 16.5	--	--	--	--	--	--	
3765	0017	3	1	CAPRA	TALUS	ND	1	R	?	?		24.3	23.2	13.0	--	16.3	15.8	--	--	--	--	--	--	
3764	0029	3	1	CAPRA	TALUS	ND	1	R	?	?		26.6	24.8	13.7	--	16.3	15.8	--	--	--	--	--	--	
3761	0003	3	1	CAPRA	TALUS	ND	1	R	?	B		15.9	24.4	14.0	--	16.2	15.9	--	--	--	--	--	--	
3753	0001	3	1	CAPRA	TALUS	ND	1	L	?	?		24.5	23.3	13.1	--	15.7	14.6	--	--	--	--	--	--	
3752	[illegible]	3	1	CAPRA	TALUS	ND	1	R	?	?		26.6	25.2	14.0	--	17.8	16.7	--	--	--	--	--	--	
3738	0001	3	1	CAPRA	TALUS	ND	1	R	?	B		32.4	29.7	17.5	--	21.4	19.7	--	--	--	--	--	--	
3712	0004	3	1	CAPRA	TALUS	ND	1	L	?	?		27.3	26.6	14.0	--	17.6	16.8	--	--	--	--	--	--	
0555	0017	3	1	CAPRA	TALUS	ND	3	R	?	Y		26.0	23.8	--	--	E 15.0	--	--	--	--	--	--	--	
0286	0022	3	1	CAPRA	TALUS	ND	1	L	?	?		28.1	26.5	14.4	--	17.3	16.5	--	--	--	--	--	--	
0286	0021	3	1	CAPRA	TALUS	ND	1	R	?	B	4	32.3	30.6	17.1	--	19.4	19.7	--	--	--	--	--	--	
0863	0001	3	1	CAPRA	TALUS	ND	4	R	?	B		--	--	--	--	--	17.2	--	--	--	--	--	--	
1908	0006	3	1	CAPRA	TALUS	ND	1	L	?	?		25.2	24.1	13.5	--	16.8	15.2	--	--	--	--	--	--	
1908	0006	3	1	CAPRA	TALUS	ND	1	L	?	?		25.2	24.1	13.5	--	16.8	15.2	--	--	--	--	--	--	
1905	0014	3	1	CAPRA	TALUS	ND	4	L	?	?		25.6	24.4	13.5	--	E 17.5	16.7	--	--	--	--	--	--	
1321	0004	3	1	CAPRA	TALUS	ND	1	L	?	?		29.0	27.5	15.2	--	18.0	17.4	--	--	--	--	--	--	
1317	0019	3	1	CAPRA	TALUS	ND	1	R	?	?		27.9	25.5	15.1	--	17.4	15.7	--	--	--	--	--	--	
1320	0001	3	1	CAPRA	TALUS	ND	1	L	?	?		27.4	25.5	14.5	--	17.5	16.8	--	--	--	--	--	--	
1316	0013	3	1	CAPRA	TALUS	ND	4	L	?	?		23.4	21.8	12.8	--	15.3	15.0	--	--	--	--	--	--	
1314	0006	3	1	CAPRA	TALUS	ND	1	R	?	?		26.0	25.0	14.0	--	16.8	17.0	--	--	--	--	--	--	
0702	0002	3	1	CAPRA	TALUS	ND	1	R	?	?		25.1	24.4	13.1	--	14.9	14.7	--	--	--	--	--	--	
1339	0010	3	1	CAPRA	TALUS	ND	1	L	?	?		26.9	25.5	14.1	--	16.0	16.3	--	--	--	--	--	--	
1331	0009	3	1	CAPRA	TALUS	ND	1	R	?	?		27.0	25.4	15.0	--	18.1	15.7	--	--	--	--	--	--	
1357	0008	3	1	CAPRA	TALUS	ND	1	L	?	?		26.5	24.8	13.7	--	15.9	15.3	--	--	--	--	--	--	
1352	0006	3	1	CAPRA	TALUS	ND	1	L	?	?		25.7	24.5	13.7	--	16.3	15.5	--	--	--	--	--	--	
1343	0022	3	1	CAPRA	TALUS	ND	1	R	?	?		27.2	25.8	15.9	--	17.2	17.8	--	--	--	--	--	--	

KEY LOC	BCN	F	H	IDENTIFICATION ANM	ELM	DOM	C	S	SX	CHARAC. A	B	C M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
0009	0001	3	1	CAPRA	TALUS	ND	4	L	?	?		26.5	25.0	E 13.3	--	E 15.6	--	--	--	--	--	--	--	
0735	0002	3	1	CAPRA	TALUS	ND	4	R	?	?		27.1	--	14.4	--	--	15.3	--	--	--	--	--	--	
0312	0010	3	1	CAPRA	TALUS	ND	1	L	?	?		24.9	23.6	13.3	--	17.3	15.7	--	--	--	--	--	--	
0320	0015	3	1	CAPRA	TALUS	ND	4	L	?	?	6	--	25.3	--	--	--	--	--	--	--	--	--	--	
0320	0016	3	1	CAPRA	TALUS	ND	1	L	?	?		30.0	28.0	15.0	--	E 17.0	E 17.0	--	--	--	--	--	--	
1306	0002	3	1	CAPRA	TALUS	ND	1	R	?	?		27.5	25.9	15.0	--	17.7	16.5	--	--	--	--	--	--	
0791	0011	3	1	CAPRA	TALUS	ND	1	R	?	?		28.0	26.0	14.5	--	18.3	16.5	--	--	--	--	--	--	
0755	0010	3	1	CAPRA	TALUS	ND	1	L	?	?		28.0	25.5	14.6	--	17.0	16.1	--	--	--	--	--	--	
0782	0003	3	1	CAPRA	TALUS	ND	1	R	?	?		27.5	26.4	15.1	--	18.5	16.7	--	--	--	--	--	--	
0722	0007	3	1	CAPRA	TALUS	ND	1	R	?	?	3	--	25.8	--	--	--	15.8	--	--	--	--	--	--	
3769	0007	3	1	CAPRA	TALUS	ND	1	R	?	J		30.2	28.2	16.2	--	20.2	18.0	--	--	--	--	--	--	
3769	0011	3	1	CAPRA	TALUS	ND	1	R	?	8		29.6	27.5	15.0	--	17.2	16.6	--	--	--	--	--	--	
1916	0042	3	1	CAPRA	TALUS	ND	1	R	?	?		27.8	25.8	E 14.0	--	16.6	--	--	--	--	--	--	--	
1915	0085	3	1	CAPRA	TALUS	ND	1	L	?	?		27.2	25.2	14.1	--	17.3	15.9	--	--	--	--	--	--	
1916	0041	3	1	CAPRA	TALUS	ND	1	R	?	?		27.2	26.4	14.5	--	16.6	16.2	--	--	--	--	--	--	
0745	0031	3	1	CAPRA	TALUS	ND	1	R	?	?		31.3	30.4	17.6	--	20.9	18.5	--	--	--	--	--	--	
0745	0033	3	1	CAPRA	TALUS	ND	1	L	?	?		28.8	27.2	15.3	--	19.0	17.2	--	--	--	--	--	--	
0705	0006	3	1	CAPRA	TALUS	ND	4	R	?	?		30.5	29.1	16.2	--	E 17.8	E 17.4	--	--	--	--	--	--	
0795	0008	3	1	CAPRA	TALUS	ND	1	R	?	8		31.0	30.5	16.9	--	21.6	18.7	--	--	--	--	--	--	
0747	0007	3	1	CAPRA	TALUS	ND	1	L	?	?		28.4	27.2	15.4	--	18.7	17.2	--	--	--	--	--	--	
0825	0004	3	1	CAPRA	TALUS	ND	4	L	?	?		26.0	--	14.0	--	--	16.2	--	--	--	--	--	--	
1927	0002	3	1	CAPRA	TALUS	ND	1	L	?	A		30.8	29.0	16.2	--	19.5	18.1	--	--	--	--	--	--	
1923	0031	3	1	CAPRA	TALUS	ND	1	L	?	?		27.4	26.7	15.5	--	18.1	16.7	--	--	--	--	--	--	
0171	0051	3	1	CAPRA	TALUS	ND	1	R	?	?		25.6	24.2	13.8	--	16.8	15.8	--	--	--	--	--	--	
0159	0004	3	1	CAPRA	TALUS	ND	1	R	?	Y		26.4	25.4	14.2	--	16.4	16.0	--	--	--	--	--	--	
0159	0005	3	1	CAPRA	TALUS	ND	1	R	?	Y		E 28.3	E 26.7	14.7	--	E 18.2	E 17.0	--	--	--	--	--	--	
0159	0006	3	1	CAPRA	TALUS	ND	1	L	?	?		E 25.0	23.9	13.2	--	16.5	15.7	--	--	--	--	--	--	
1930	0085	3	1	CAPRA	TALUS	ND	4	R	?	?		26.7	24.6	14.0	--	15.8	15.5	--	--	--	--	--	--	
1930	0086	3	1	CAPRA	TALUS	ND	4	R	?	?		--	28.0	--	--	--	17.5	--	--	--	--	--	--	
1930	0084	3	1	CAPRA	TALUS	ND	1	L	?	?		29.3	27.3	15.7	--	18.5	17.3	--	--	--	--	--	--	
1925	0009	3	1	CAPRA	TALUS	ND	1	R	?	?		--	27.4	--	--	18.2	--	--	--	--	--	--	--	
0188	0007	3	1	CAPRA	TALUS	ND	1	L	?	?		25.0	24.3	13.4	--	16.1	15.0	--	--	--	--	--	--	
0174	0004	3	1	CAPRA	TALUS	ND	1	L	?	?		27.1	25.5	14.7	--	17.8	16.8	--	--	--	--	--	--	
0175	0011	3	1	CAPRA	TALUS	ND	1	R	?	?		26.5	25.5	14.3	--	16.2	16.4	--	--	--	--	--	--	
0161	0068	3	1	CAPRA	TALUS	ND	1	L	?	Y		24.7	23.0	12.8	--	E 15.4	15.1	--	--	--	--	--	--	
0866	0005	3	1	CAPRA	TALUS	ND	1	R	?	?		25.7	24.6	13.6	--	16.8	15.8	--	--	--	--	--	--	
1935	0008	3	1	CAPRA	TALUS	ND	1	L	?	8		E 29.5	27.5	16.3	--	18.7	17.1	--	--	--	--	--	--	
0192	0006	3	1	CAPRA	TALUS	ND	1	R	?	8		25.9	25.2	14.0	--	17.1	16.0	--	--	--	--	--	--	
0183	0019	3	1	CAPRA	TALUS	ND	4	R	?	Y		26.1	25.1	13.5	--	15.8	15.5	--	--	--	--	--	--	
0183	0020	3	1	CAPRA	TALUS	ND	1	R	?	8	6	28.0	26.6	15.4	--	18.9	17.5	--	--	--	--	--	--	
0215	0038	3	1	CAPRA	TALUS	ND	1	R	?	Y		25.2	24.3	13.7	--	17.2	16.0	--	--	--	--	--	--	
0207	0001	3	1	CAPRA	TALUS	ND	1	L	?	?		25.6	--	13.2	--	16.8	--	--	--	--	--	--	--	
0206	0036	3	1	CAPRA	TALUS	ND	1	R	?	?		25.6	24.0	13.5	--	15.8	14.3	--	--	--	--	--	--	
0206	0037	3	1	CAPRA	TALUS	ND	3	L	?	?		--	27.3	--	--	--	--	--	--	--	--	--	--	
0197	0019	3	1	CAPRA	TALUS	ND	1	R	?	?		25.6	23.9	E 13.5	--	16.2	E 15.7	--	--	--	--	--	--	
0194	0020	3	1	CAPRA	TALUS	ND	4	L	?	?		25.7	24.5	13.5	--	16.2	15.3	--	--	--	--	--	--	
2102	0018	3	1	CAPRA	TALUS	ND	1	L	?	?		26.5	24.5	E 13.5	--	16.0	15.2	--	--	--	--	--	--	
0201	0004	3	1	CAPRA	TALUS	ND	1	L	?	?		26.2	25.2	14.4	--	16.1	15.2	--	--	--	--	--	--	
2111	0026	3	1	CAPRA	TALUS	ND	1	L	?	?		26.5	--	14.5	--	--	--	--	--	--	--	--	--	
2111	0027	3	1	CAPRA	TALUS	ND	1	L	?	?		28.7	27.2	16.1	--	19.1	17.3	--	--	--	--	--	--	
2111	0028	3	1	CAPRA	TALUS	ND	1	L	?	?		29.2	27.9	16.1	--	19.5	17.0	--	--	--	--	--	--	
2306	0013	3	1	CAPRA	TALUS	ND	1	R	?	?		26.3	25.3	14.5	--	16.5	16.4	--	--	--	--	--	--	
2110	0008	3	1	CAPRA	TALUS	ND	1	R	?	?		28.8	27.6	16.1	--	18.9	16.7	--	--	--	--	--	--	
2109	0005	3	1	CAPRA	TALUS	ND	1	L	?	?		26.9	26.6	E 13.5	--	17.1	15.7	--	--	--	--	--	--	
2108	0018	3	1	CAPRA	TALUS	ND	1	R	?	I		26.0	24.5	14.0	--	16.8	16.5	--	--	--	--	--	--	
2106	0002	3	1	CAPRA	TALUS	ND	1	L	?	?		31.9	29.3	17.2	--	20.0	19.4	--	--	--	--	--	--	
2309	0066	3	1	CAPRA	TALUS	ND	1	R	?	?		26.9	25.3	14.0	--	17.4	16.1	--	--	--	--	--	--	
2307	0063	3	1	CAPRA	TALUS	ND	1	L	?	?	4	25.0	24.2	13.5	--	15.9	14.9	--	--	--	--	--	--	
1941	0032	3	1	CAPRA	TALUS	ND	3	L	?	?		E 27.0	25.3	14.5	--	15.6	--	--	--	--	--	--	--	
0876	0018	3	1	CAPRA	TALUS	ND	1	R	?	?		28.5	27.0	15.5	--	18.5	17.8	--	--	--	--	--	--	
0876	0019	3	1	CAPRA	TALUS	ND	1	L	?	?		28.8	26.9	15.2	--	18.5	17.9	--	--	--	--	--	--	
2117	0008	3	1	CAPRA	TALUS	ND	4	R	?	Y		--	--	13.0	--	E 15.4	--	--	--	--	--	--	--	
2120	0006	3	1	CAPRA	TALUS	ND	1	R	?	8		29.4	27.7	15.9	--	20.3	18.0	--	--	--	--	--	--	
2118	0016	3	1	CAPRA	TALUS	ND	1	R	?	?		28.0	26.1	15.0	--	17.2	16.3	--	--	--	--	--	--	
0180	0025	3	1	CAPRA	TALUS	ND	1	R	?	?	?	28.7	26.8	15.5	--	17.7	17.2	--	--	--	--	--	--	
0180	0024	3	1	CAPRA	TALUS	ND	1	L	?	?	?	28.2	26.7	15.2	--	18.5	17.1	--	--	--	--	--	--	
3715	0029	3	1	CAPRA	CALC	ND	1	L	?	A		56.9	--	--	--	--	--	--	--	--	--	--	--	
3706	0017	3	1	CAPRA	CALC	ND	1	R	?	8		58.3	16.0	21.1	--	--	19.0	--	--	--	--	--	--	
0554	0004	3	1	CAPRA	CALC	ND	1	L	?	8		49.3	13.2	29.3	--	--	16.3	--	--	--	--	--	--	
0554	0005	3	1	CAPRA	CALC	ND	1	L	?	Y		--	14.3	19.2	--	45.3	--	--	--	--	--	--	--	
0542	0006	3	1	CAPRA	CALC	ND	1	R	?	8		52.9	14.4	19.4	--	--	18.7	--	--	--	--	--	--	
0279	0016	3	1	CAPRA	CALC	ND	1	R	?	6		--	16.7	21.7	--	54.6	19.8	--	--	--	--	--	--	
3766	0017	3	1	CAPRA	CALC	ND	1	L	?	8		54.1	15.0	19.9	--	--	17.2	--	--	--	--	--	--	
3765	0020	3	1	CAPRA	CALC	ND	1	R	?	8		48.3	19.0	15.2	--	--	17.0	--	--	--	--	--	--	
3750	0046	3	1	CAPRA	CALC	ND	1	L	?	8		52.0	15.0	19.6	--	--	17.2	--	--	--	--	--	--	
3711	0035	3	1	CAPRA	CALC	ND	1	R	?	8		53.4	17.0	20.9	--	--	19.0	--	--	--	--	--	--	
3711	0036	3	1	CAPRA	CALC	ND	1	L	?	8		50.0	16.4	--	--	--	18.5	--	--	--	--	--	--	
0466	0011	3	1	CAPRA	CALC	ND	1	L	?	8		57.8	17.5	22.2	--	--	20.8	--	--	--	--	--	--	
1901	0016	3	1	CAPRA	CALC	ND	1	L	?	8		54.5	15.3	--	--	--	18.6	--	--	--	--	--	--	
1318	0002	3	1	CAPRA	CALC	ND	1	L	?	Y		--	--	21.3	--	--	--	--	--	--	--	--	--	
1316	0014	3	1	CAPRA	CALC	ND	1	R	?	6		62.0	17.3	23.0	--	--	--	--	--	--	--	--	--	
1343	0024	3	1	CAPRA	CALC	ND	4	R	?	?		--	--	20.2	--	--	--	--	--	--	--	--	--	
0321	0009	3	1	CAPRA	CALC	ND	1	R	?	4		--	--	21.1	--	51.0	--	--	--	--	--	--	--	
0321	0008	3	1	CAPRA	CALC	ND	1	R	?	4		--	--	17.6	--	44.3	--	--	--	--	--	--	--	
1306	0003	3	1	CAPRA	CALC	ND	1	L	?	8		53.0	13.9	18.4	--	--	17.0	--	--	--	--	--	--	
3769	0012	3	1	CAPRA	CALC	ND	1	R	?	8		53.5	15.2	22.1	--	--	17.2	--	--	--	--	--	--	
0698	0011	3	1	CAPRA	CALC	ND	1	R	?	8		56.3	16.8	21.1	20.9	--	--	--	--	--	--	--	--	
0746	0003	3	1	CAPRA	CALC	ND	1	L	?	8		49.7	15.1	18.2	17.8	--	--	--	--	--	--	--	--	
0159	0007	3	1	CAPRA	CALC	ND	4	L	?	8	6	51.5	16.3	18.7	--	--	18.8	--	--	--	--	--	--	
1932	0014	3	1	CAPRA	CALC	ND	1	L	?	8		52.3	15.7	20.3	--	--	18.6	--	--	--	--	--	--	
0161	0065	3	1	CAPRA	CALC	ND	1	L	?	?		--	17.5	20.1	--	--	18.3	--	--	--	--	--	--	
0192	0005	3	1	CAPRA	CALC	ND	1	R	?	8		51.5	15.0	20.8	--	--	17.5	--	--	--	--	--	--	
0886	0008	3	1	CAPRA	CALC	ND	1	R	?	A		--	18.2	--	--	--	--	--	--	--	--	--	--	
2115	0032	3	1	CAPRA	CALC	ND	1	R	?	?		--	16.6	20.9	--	--	19.4	--	--	--	--	--	--	
3711	0037	3	1	CAPRA	T-C+4	ND	1	L	?	8		21.8	--	--	--	--	--	--	--	--	--	--	--	
3710	0010	3	1	CAPRA	T-C+4	ND	1	L	?	8		21.4	--	--	--	--	--	--	--	--	--	--	--	
0192	0008	3	1	CAPRA	T-C+4	ND	1	R	?	8		20.5	--	--	--	--	--	--	--	--	--	--	--	
2309	0046	3	1	CAPRA	T-C+4	ND	3	L	?	?		20.3	--	--	--	--	--	--	--	--	--	--	--	
1313	0015	3	1	CAPRA	MT3+4	ND	1	?	?	4		--	--	--	--	--	U 16.2	--	--	--	--	--	--	
0556	0006	3	1	CAPRA	MT3+4	ND	4	R	?	Y		18.5	17.9	18.9	--	--	--	--	--	--	--	--	--	

KEY / IDENTIFICATION / CHARAC. MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

LOC	BON	F	M	ANM	ELM	DOM	C	S	SX	A	B	C M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
0399	0039	3	1	CAPRA	MT3+4	ND	1	L	?	8		--	--	--	--	28.0	17.7	--	--	--	--	--	--	
3758	0003	3	1	CAPRA	MT3+4	ND	3	L	?	?		19.1	18.8	--	--	--	--	--	--	--	--	--	--	
3758	0002	3	1	CAPRA	MT3+4	ND	1	R	?	8		--	--	--	E 11.2	21.5	14.2	--	--	--	--	--	8.0	
3721	0005	3	1	CAPRA	MT3+4	ND	1	L	?	S		--	--	--	10.5	21.5	E 13.5	--	--	--	--	--	8.4	
3711	0025	3	1	CAPRA	MT3+4	ND	1	L	?	8		--	--	--	11.5	22.8	15.0	101.0	--	--	--	--	8.7	
3710	0015	3	1	CAPRA	MT3+4	ND	1	R	?	8		18.0	17.9	15.8	11.3	21.4	14.5	102.1	104.1	--	--	--	8.3	
3710	0009	3	1	CAPRA	MT3+4	ND	1	L	?	8		18.8	18.2	17.8	11.8	22.8	15.0	116.8	119.5	--	--	--	9.2	
1304	0007	3	1	CAPRA	MT3+4	ND	1	L	?	6		--	--	--	--	E 25.0	15.2	--	--	--	--	--	9.1	
1304	0008	3	1	CAPRA	MT3+4	ND	1	?	?	8		--	--	--	--	--	14.2	--	--	--	--	--	9.6	
0555	0019	3	1	CAPRA	MT3+4	ND	3	R	?	Y		18.3	17.8	17.3	--	--	--	--	--	--	--	--	--	
1906	0007	3	1	CAPRA	MT3+4	ND	1	R	?	8		--	--	--	10.6	E 24.5	14.5	--	--	--	--	--	9.0	
1321	0002	3	1	CAPRA	MT3+4	ND	3	R	?	8		21.7	21.1	20.8	--	--	--	--	--	--	--	--	--	
1334	0022	3	1	CAPRA	MT3+4	ND	3	R	?	?		18.5	18.5	16.8	11.1	--	--	--	--	--	--	--	--	
1910	0006	3	1	CAPRA	MT3+4	ND	1	?	?	J		--	--	--	--	U 27.5	U 16.3	--	--	--	--	--	--	
0690	0016	3	1	CAPRA	MT3+4	ND	1	?	?	A		--	--	--	11.8	P 23.5	14.5	--	--	--	--	--	P 8.8	
0821	0004	3	1	CAPRA	MT3+4	ND	1	L	?	6		--	--	--	11.5	22.0	14.5	--	--	--	--	--	8.8	
1938	0019	3	1	CAPRA	MT3+4	ND	1	?	?	8		--	--	--	--	E 23.5	E 14.0	--	--	--	--	--	--	
0203	0002	3	1	CAPRA	MT3+4	ND	1	R	?	8		--	--	--	10.8	20.9	13.9	--	--	--	--	--	--	
0199	0001	3	1	CAPRA	MT3+4	ND	1	L	?	8		--	--	--	--	22.5	14.6	--	--	--	--	--	--	
2113	0002	3	1	CAPRA	MT3+4	ND	1	L	?	8		19.8	18.9	18.2	12.1	E 22.0	E 14.9	104.4	109.2	--	--	--	--	
2309	0048	3	1	CAPRA	MT3+4	ND	3	L	?	?		18.8	18.2	18.0	--	--	--	--	--	--	--	--	--	
0813	0008	3	1	CAPRA	MT3+4	ND	1	R	?	8		--	--	--	12.0	22.9	14.6	107.0	--	--	--	--	8.7	
1910	0007	3	1	CAPRA	PH1PS	ND	1	5	?	J		35.5	11.3	11.5	8.9	--	--	--	--	--	--	--	--	
0821	0005	3	1	CAPRA	PH1PS	ND	1	L	?	6		33.1	10.1	10.5	8.7	--	--	--	--	--	--	--	--	
0821	0006	3	1	CAPRA	PH1PS	ND	1	L	?	6		--	--	10.2	8.5	--	--	--	--	--	--	--	--	
0203	0004	3	1	CAPRA	PH1PS	ND	1	R	?	8		30.5	10.6	10.0	8.8	--	--	--	--	--	--	--	--	
0203	0003	3	1	CAPRA	PH1PS	ND	1	R	?	8		31.0	10.5	9.8	8.5	--	--	--	--	--	--	--	--	
0203	0005	3	1	CAPRA	PH2PS	ND	1	R	?	8		--	10.2	--	7.0	--	--	--	--	--	--	--	--	
0203	0006	3	1	CAPRA	PH2PS	ND	1	R	?	8		--	10.1	--	7.0	--	--	--	--	--	--	--	--	
1303	0017	3	1	CAPRA	PH1	ND	1	4	?	8		30.5	10.7	10.5	8.4	--	--	--	--	--	--	--	--	
0302	0018	3	1	CAPRA	PH1	ND	4	5	?	J		36.5	12.5	13.0	10.9	--	--	--	--	--	--	--	--	
0279	0030	3	1	CAPRA	PH1	ND	4	4	?	?		31.1	10.7	10.7	8.8	--	--	--	--	--	--	--	--	
0279	0031	3	1	CAPRA	PH1	ND	4	5	?	?		32.1	10.8	10.6	8.9	--	--	--	--	--	--	--	--	
0282	0016	3	1	CAPRA	PH1	ND	4	4	?	8		34.4	11.7	11.7	9.9	--	--	--	--	--	--	--	--	
3767	0018	3	1	CAPRA	PH1	ND	4	5	?	8		36.4	E 12.5	E 12.0	10.3	--	--	--	--	--	--	--	--	
3724	0077	3	1	CAPRA	PH1	ND	4	4	?	8		E 32.3	11.2	11.4	9.6	--	--	--	--	--	--	--	--	
3724	0081	3	1	CAPRA	PH1	ND	3	4	?	8		--	12.5	--	--	--	--	--	--	--	--	--	--	
3724	0076	3	1	CAPRA	PH1	ND	4	4	?	8		35.7	12.2	--	9.9	--	--	--	--	--	--	--	--	
3707	0032	3	1	CAPRA	PH1	ND	4	4	?	8		34.0	11.3	11.1	9.1	--	--	--	--	--	--	--	--	
0355	0006	3	1	CAPRA	PH1	ND	1	4	?	8		38.2	15.5	14.1	12.9	--	--	--	--	--	--	--	--	
0542	0008	3	1	CAPRA	PH1	ND	4	5	?	8		33.7	11.8	11.6	10.3	--	--	--	--	--	--	--	--	
3765	0023	3	1	CAPRA	PH1	ND	1	4	?	S		31.8	11.5	10.9	9.0	--	--	--	--	--	--	--	--	
3765	0025	3	1	CAPRA	PH1	ND	1	5	?	8		--	11.3	--	--	--	--	--	--	--	--	--	--	
3758	0026	3	1	CAPRA	PH1	ND	4	5	?	?		E 32.0	E 12.0	E 11.6	9.8	--	--	--	--	--	--	--	--	
3758	0027	3	1	CAPRA	PH1	ND	4	5	?	?		10.7	--	--	--	--	--	--	--	--	--	--	--	
3764	0088	3	1	CAPRA	PH1	ND	4	4	?	8		--	--	10.6	--	--	--	--	--	--	--	--	--	
3737	0015	3	1	CAPRA	PH1	ND	4	4	?	?		E 32.5	12.0	--	9.7	--	--	--	--	--	--	--	--	
3753	0003	3	1	CAPRA	PH1	ND	1	4	?	8		32.7	11.3	10.6	8.9	--	--	--	--	--	--	--	--	
3753	0004	3	1	CAPRA	PH1	ND	1	5	?	8		33.3	12.1	11.4	9.5	--	--	--	--	--	--	--	--	
3710	0016	3	1	CAPRA	PH1	ND	1	5	?	8		34.4	10.8	11.1	8.8	--	--	--	--	--	--	--	--	
0286	0023	3	1	CAPRA	PH1	ND	4	5	?	8		34.5	12.4	12.5	11.2	--	--	--	--	--	--	--	--	
0286	0024	3	1	CAPRA	PH1	ND	4	5	?	8		34.1	12.2	11.8	10.0	--	--	--	--	--	--	--	--	
1906	0004	3	1	CAPRA	PH1	ND	1	4	?	8		35.2	12.8	12.7	10.7	--	--	--	--	--	--	--	--	
1325	0006	3	1	CAPRA	PH1	ND	4	5	?	?		32.7	10.7	10.2	8.7	--	--	--	--	--	--	--	--	
1362	0004	3	1	CAPRA	PH1	ND	4	5	?	?		33.3	10.3	10.6	8.3	--	--	--	--	--	--	--	--	
1348	0010	3	1	CAPRA	PH1	ND	4	5	?	?		32.2	10.2	10.4	9.0	--	--	--	--	--	--	--	--	
1354	0008	3	1	CAPRA	PH1	ND	3	5	?	?		--	--	12.0	--	--	--	--	--	--	--	--	--	
1343	0023	3	1	CAPRA	PH1	ND	4	5	?	?		34.6	10.3	10.3	9.3	--	--	--	--	--	--	--	--	
1915	0084	3	1	CAPRA	PH1	ND	4	4	?	?		38.6	12.4	12.8	10.9	--	--	--	--	--	--	--	--	
0825	0003	3	1	CAPRA	PH1	ND	4	5	?	8		36.0	12.4	13.1	11.0	--	--	--	--	--	--	--	--	
1923	0022	3	1	CAPRA	PH1	ND	4	5	?	8		34.0	11.7	11.3	9.1	--	--	--	--	--	--	--	--	
0161	0025	3	1	CAPRA	PH1	ND	4	5	?	J		E 35.8	11.5	E 9.8	10.6	--	--	--	--	--	--	--	--	
1936	0019	3	1	CAPRA	PH1	ND	4	4	?	?		--	--	11.5	10.0	--	--	--	--	--	--	--	--	
0206	0039	3	1	CAPRA	PH1	ND	1	5	?	8		30.6	10.4	9.8	8.8	--	--	--	--	--	--	--	--	
2103	0016	3	1	CAPRA	PH1	ND	3	5	?	8		--	10.7	--	8.4	--	--	--	--	--	--	--	--	
2115	0039	3	1	CAPRA	PH1	ND	4	4	?	8		35.2	12.5	12.5	10.5	--	--	--	--	--	--	--	--	
0325	0016	3	1	CAPRA	PH2	ND	4	5	?	8		23.0	11.7	--	8.4	--	--	--	--	--	--	--	--	
0279	0032	3	1	CAPRA	PH2	ND	4	5	?	?		19.7	10.5	9.0	7.4	--	--	--	--	--	--	--	--	
3724	0082	3	1	CAPRA	PH2	ND	4	4	?	8		21.7	10.8	8.[illegible]	7.7	--	--	--	--	--	--	--	--	
3724	0083	3	1	CAPRA	PH2	ND	3	4	?	8		21.2	10.9	8.9	8.0	--	--	--	--	--	--	--	--	
3707	0034	3	1	CAPRA	PH2	ND	4	5	?	8		28.3	13.8	11.0	9.8	--	--	--	--	--	--	--	--	
0291	0002	3	1	CAPRA	PH2	ND	1	4	?	A		25.1	13.1	--	0.5	--	--	--	--	--	--	--	--	
3765	0027	3	1	CAPRA	PH2	ND	1	4	?	8		25.0	12.9	10.4	9.5	--	--	--	--	--	--	--	--	
3764	0096	3	1	CAPRA	PH2	ND	1	4	?	6		19.0	11.5	9.8	8.6	--	--	--	--	--	--	--	--	
3764	0095	3	1	CAPRA	PH2	ND	3	5	?	4		--	--	U 10.5	U 9.0	--	--	--	--	--	--	--	--	
3752	0023	3	1	CAPRA	PH2	ND	1	5	?	S		22.4	11.1	9.2	8.3	--	--	--	--	--	--	--	--	
3710	0018	3	1	CAPRA	PH2	ND	1	4	?	8		24.1	10.9	9.1	7.6	--	--	--	--	--	--	--	--	
3710	0017	3	1	CAPRA	PH2	ND	1	5	?	8		23.3	11.1	9.0	7.7	--	--	--	--	--	--	--	--	
3704	0019	3	1	CAPRA	PH2	ND	4	5	?	8		21.2	11.9	E 9.2	8.5	--	--	--	--	--	--	--	--	
3704	0020	3	1	CAPRA	PH2	ND	4	5	?	8		22.7	11.0	E 9.2	8.0	--	--	--	--	--	--	--	--	
3704	0021	3	1	CAPRA	PH2	ND	4	4	?	8	7	22.1	11.2	9.2	8.1	--	--	--	--	--	--	--	--	
1906	0005	3	1	CAPRA	PH2	ND	1	5	?	8		21.5	12.5	10.3	9.4	--	--	--	--	--	--	--	--	
0716	0019	3	1	CAPRA	PH2	ND	4	5	?	?		--	--	9.7	--	--	--	--	--	--	--	--	--	
1342	0002	3	1	CAPRA	PH2	ND	1	5	?	?		23.1	11.2	9.3	7.9	--	--	--	--	--	--	--	--	
0159	0019	3	1	CAPRA	PH2	ND	1	4	?	8		22.6	12.7	10.9	9.7	--	--	--	--	--	--	--	--	
1925	0013	3	1	CAPRA	PH2	ND	3	4	?	?		21.3	10.0	E 8.0	6.0	--	--	--	--	--	--	--	--	
0160	0022	3	1	CAPRA	PH2	ND	4	5	?	8		23.0	10.4	9.0	7.6	--	--	--	--	--	--	--	--	
0544	0005	3	1	CAPRA	PH3	ND	1	4	?	?		29.0	--	--	--	--	--	--	--	--	--	--	--	
3764	0098	3	1	CAPRA	PH3	ND	1	4	?	?		27.7	22.2	14.5	4.4	--	--	--	--	--	--	--	--	
3704	0029	3	1	CAPRA	PH3	ND	1		?	?		29.3	23.8	14.2	--	--	--	--	--	--	--	--	--	
3704	0030	3	1	CAPRA	PH3	ND	1		?	?		30.6	25.1	15.2	--	--	--	--	--	--	--	--	--	
2309	0073	3	1	CAPRA	PH3	ND	1	5	?	?		25.4	20.5	14.3	--	--	--	--	--	--	--	--	--	
1936	0048	3	6	GAZEL	MAX/T	W	4	R	?	A		--	--	--	14.2	10.1	17.3	17.1	11.0	22.5	--	--	--	
0291	0001	3	5	GAZEL	MAN/T	W	1	R	?	J		--	--	24.2	--	--	19.0	--	--	--	--	--	--	
0731	0022	3	6	GAZEL	MAN/T	W	1	R	?	S		--	--	--	--	--	--	E 18.0	--	--	--	--	--	
0731	0022	3	5	GAZEL	MAN/T	W	1	R	?	S		--	--	--	--	--	--	30.2	--	--	--	--	--	
0214	0002	3	6	GAZEL	MAN/T	W	1	R	?	6		10.0	5.1	E 10.5	12.6	5.8	17.5	18.3	5.4	20.7	--	--	--	
0214	0002	3	5	GAZEL	MAN/T	W	1	R	?	6		62.5	40.7	20.0	--	11.2	17.6	29.2	--	121.5	--	--	--	
3761	0040	3	1	GAZEL	HORN	W	1	R	M	8		--	--	--	--	31.0	24.0	E 87.0	--	--	--	--	--	
0286	0006	3	1	GAZEL	HORN	W	1	L	M	A		142.0	142.0	140.5	E 136.0	E 29.5	23.8	E 83.0	--	--	--	--	--	

KEY IDENTIFICATION CHARAC. MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

LOC	BON	F	M	ANM	ELM	DOM	C	S	SX	A	B	C M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
1357	0001	3	1	GAZEL	HORN	W	1	L	M	8		E135.0	115.0	--	--	32.8	21.8	86.5	32.5	--	--	--	--	
0717	0011	3	1	GAZEL	HORN	W	1	L	M	8		E150.0	145.0	E158.0	E143.0	32.8	24.5	92.0	--	--	--	--	--	
0171	0041	3	1	GAZEL	HORN	W	1	R	F	8	7	--	--	--	--	17.2	14.8	50.5	--	--	--	--	--	
0159	0089	3	1	GAZEL	HORN	W	1	R	F	8		E 90.0	77.5	--	--	E 16.5	15.5	E 51.0	--	--	--	--	--	
2102	0048	3	1	GAZEL	HORN	W	1	L	F	8		--	36.0	--	--	E 16.5	13.0	E 47.0	--	--	--	--	--	
2115	0017	3	1	GAZEL	HORN	W	1	L	M	8		--	50.0	--	--	31.5	22.5	85.5	30.2	--	--	--	--	
2126	0030	3	1	GAZEL	HORN	W	1	L	F	8		82.5	82.5	85.0	80.5	15.5	14.0	47.0	--	--	--	--	--	
2118	0011	3	1	GAZEL	HORN	W	1	R	F	8		E 80.0	70.0	--	--	16.3	13.0	47.0	--	--	--	--	--	
3712	0010	3	1	GAZEL	SCAP	W	1	R	?	8		15.6	--	21.6	E 18.5	16.5	--	--	--	--	--	--	--	
1916	0046	3	1	GAZEL	SCAP	W	1	R	?	8		13.8	E 17.5	E 21.5	18.9	14.0	--	--	--	--	--	--	--	
0728	0015	3	1	GAZEL	SCAP	W	1	R	?	8		16.8	31.0	25.8	23.4	--	--	--	--	--	--	--	--	
0171	0072	3	1	GAZEL	SCAP	W	4	R	?	?		17.0	--	--	--	--	--	--	--	--	--	--	--	
2112	0026	3	1	GAZEL	SCAP	W	1	R	?	8		15.5	--	21.5	20.2	15.1	--	--	--	--	--	--	--	
1316	0010	3	1	GAZEL	HUMER	W	1	R	?	8		E 25.1	--	--	--	--	--	--	--	--	--	--	--	
0194	0007	3	1	GAZEL	HUMER	W	4	R	?	?		E 25.8	24.3	--	--	--	--	--	--	--	--	--	--	
0215	0014	3	1	GAZEL	HUMER	W	1	L	?	8		29.5	26.8	--	--	--	--	--	--	--	--	--	--	
2309	0086	3	1	GAZEL	HUMER	W	3	L	?	8		--	--	--	E 34.0	E 38.0	--	--	--	--	--	--	--	
0308	0006	?	1	GAZEL	RAD	W	1	L	?	8		25.5	22.5	E 13.6	--	--	--	--	--	--	--	--	--	
0286	0017	3	1	GAZEL	ULNA	W	1	L	?	8		12.9	19.4	16.1	--	--	--	--	--	--	--	--	--	
1306	0001	3	1	GAZEL	MC3+4	W	1	R	?	8		19.0	13.5	11.2	--	--	--	--	--	--	--	--	--	
0848	0010	3	1	GAZEL	MC3+4	W	4	R	?	?		--	16.7	--	--	--	--	--	--	--	--	--	--	
3738	0014	3	1	GAZEL	IL/IS	W	1	R	F	8		26.0	--	--	--	--	16.4	7.5	--	--	--	--	--	
1306	0004	3	1	GAZEL	FEMUR	W	1	?	?	8		--	17.0	--	--	--	--	--	--	--	--	--	--	
3763	0060	3	1	GAZEL	TALUS	W	1	R	?	?		26.3	23.4	15.0	--	15.9	14.8	--	--	--	--	--	--	
0849	0002	3	1	GAZEL	TALUS	W	1	R	?	8		27.4	24.8	15.1	--	15.8	13.5	--	--	--	--	--	--	
0180	0022	3	1	GAZEL	TALUS	W	1	L	?	?	7	28.3	26.3	16.3	--	16.8	14.8	--	--	--	--	--	--	
1908	0026	3	1	GAZEL	MT3+4	W	1	L	?	8		--	--	--	--	20.8	16.0	--	--	--	--	--	9.5	
1925	0004	3	1	GAZEL	MT3+4	W	1	R	?	8		--	--	--	21.0	15.6	10.5	--	--	--	--	--	9.5	
1375	0007	3	1	GAZEL	MT3+4	W	1	?	?	8		--	--	--	--	E 20.0	15.7	--	--	--	--	--	--	
3767	0019	3	1	GAZEL	PH1	W	1	5	?	8		36.5	10.0	8.1	7.4	--	--	--	--	--	--	--	--	
3753	0070	3	1	GAZEL	PH1	W	1	4	?	?		--	--	8.3	--	--	--	--	--	--	--	--	--	
0207	0010	3	1	GAZEL	PH1	W	1	5	?	8		E 38.0	6.5	7.2	5.8	--	--	--	--	--	--	--	--	
0857	0009	3	6	GAZEL	TTHUP	W	1	R	?	6		--	--	--	12.7	9.2	18.5	--	--	--	--	--	--	
3715	0010	3	6	GAZEL	TTHLW	W	3	L	?	A		--	--	--	10.3	6.6	10.0	--	--	--	--	--	--	
0203	0015	3	6	GAZEL	TTHLW	W	1	L	?	A		--	--	--	--	--	--	19.4	7.4	17.0	--	--	--	
1913	0018	3	1	G.SGT	HORN	W	4	R	M	A		E180.0	150.0	--	E182.5	--	27.1	--	--	--	--	--	--	
1936	0047	3	1	G.SGT	HORN	W	1	R	M	A		--	--	--	--	34.0	--	--	--	--	--	--	--	
0169	0011	3	6	BOS	MAX/T	ND	1	L	?	4		E 30.5	16.5	41.0	--	--	--	--	--	--	--	--	--	
1933	0030	3	6	BOS	MAX/T	ND	1	L	?	J		30.0	19.7	31.0	33.5	18.5	47.2	--	--	--	--	--	--	
0161	0093	3	6	BOS	MAX/T	ND	1	R	?	6		27.2	19.0	--	32.8	20.2	E 51.0	--	--	--	--	--	--	
0815	0009	3	6	BOS	MAX/T	ND	1	R	?	A		25.9	21.0	22.5	32.5	23.2	36.5	33.7	20.5	42.0	--	--	--	
0832	0001	3	6	BOS	MAX/T	ND	1	R	?	A		--	--	--	24.5	25.5	12.0	32.0	26.0	15.0	--	--	--	
0764	0001	3	6	BOS	MAX/T	ND	1	R	?	S		--	--	--	--	--	--	29.5	20.3	48.0	--	--	--	
0886	0012	3	6	BOS	MAX/T	ND	1	L	?	A		27.5	21.8	23.0	29.8	18.0	27.5	--	--	--	--	--	--	
0178	0001	3	6	BOS	MAX/T	ND	1	R	?	J		31.6	21.0	30.0	34.0	22.0	49.0	31.0	19.7	50.0	--	--	--	
0337	0001	3	5	BOS	MAN/T	ND	1	L	?	J		E161.0	95.8	65.0	--	31.7	--	E 77.0	--	E308.5	--	--	--	
0337	0001	3	6	BOS	MAN/T	ND	1	L	?	J		29.5	13.3	E 35.0	33.0	13.4	55.5	E 38.0	E 13.5	E 70.0	--	--	--	
0467	0002	3	6	BOS	MAN/T	ND	1	R	?	J		27.5	11.7	36.0	--	--	--	E 37.5	11.5	52.0	--	--	--	
3759	0001	3	6	BOS	MAN/T	ND	1	L	?	6		24.9	13.3	26.1	29.8	13.2	43.8	E 37.5	12.4	E 50.0	--	--	--	
3759	0001	3	5	BOS	MAN/T	ND	1	L	?	6		E146.0	E 90.0	51.5	--	--	--	--	--	--	--	--	--	
0310	0001	3	6	BOS	MAN/T	ND	1	L	?	8		24.5	13.6	25.0	28.0	14.4	46.5	41.4	14.5	49.0	--	--	--	
0310	0001	3	5	BOS	MAN/T	ND	1	L	?	8		--	93.2	--	--	--	59.0	--	--	--	--	--	--	
0700	0001	3	6	BOS	MAN/T	ND	1	R	?	A		22.2	14.2	12.5	26.9	16.4	24.5	--	--	--	--	--	--	
0700	0001	3	5	BOS	MAN/T	ND	1	R	?	A		--	--	--	--	34.1	--	--	--	--	--	--	--	
0167	0002	3	5	BOS	MAN/T	ND	1	R	?	J		E160.0	--	--	--	26.5	--	--	--	--	--	--	--	
0167	0001	3	6	BOS	MAN/T	ND	1	R	?	S		24.5	17.8	13.5	--	--	--	E 42.0	17.4	38.5	--	--	--	
0167	0001	3	5	BOS	MAN/T	ND	1	R	?	S		E154.5	E100.0	52.0	--	E 33.0	E 58.0	--	--	--	--	--	--	
0167	0004	3	5	BOS	MAN/T	ND	1	L	?	A		E162.0	--	--	--	32.2	--	--	--	--	--	--	--	
0167	0003	3	5	BOS	MAN/T	ND	1	R	?	A		E150.0	--	--	--	31.5	--	--	--	--	--	--	--	
0167	0002	3	6	BOS	MAN/T	ND	1	R	?	J		--	--	--	--	--	--	38.7	13.0	46.5	--	--	--	
1914	0034	3	5	BOS	MAN/T	ND	1	L	?	J		--	--	--	E 91.0	E 28.0	--	--	--	--	--	--	--	
1920	0002	3	5	BOS	MAN/T	ND	1	L	?	S		163.5	101.5	65.0	--	--	49.5	--	--	--	--	--	--	
0161	0083	3	6	BOS	MAN/T	ND	1	R	?	J		--	--	--	36.7	14.0	E 58.0	--	--	--	--	--	--	
1939	0010	3	6	BOS	MAN/T	ND	1	L	?	4		31.2	12.5	39.0	--	--	--	--	--	--	--	--	--	
2113	0049	3	6	BOS	MAN/T	ND	1	L	?	A		--	--	--	30.2	17.8	30.0	--	--	--	--	--	--	
2308	0010	3	6	BOS	MAN/T	ND	1	L	?	A		--	--	--	26.0	17.0	16.5	40.0	16.2	18.5	--	--	--	
1313	0001	3	5	BOS	MAN	ND	1	R	?	A		140.0	90.0	51.0	--	--	--	--	--	--	--	--	--	
1901	0004	3	5	BOS	MAN	ND	1	R	?	8		--	--	--	--	31.5	--	--	--	--	--	--	--	
1901	0003	3	5	BOS	MAN	ND	1	L	?	8		--	--	--	--	31.0	--	--	--	--	--	--	--	
1901	0002	3	5	BOS	MAN	ND	1	R	?	8	7	--	--	--	--	30.5	--	--	--	--	--	--	--	
1901	0001	3	5	BOS	MAN	ND	1	R	?	A	7	--	--	--	E130.0	34.5	--	--	--	--	--	--	--	
1901	0007	3	5	BOS	MAN	ND	1	R	?	8	7	--	--	E 58.5	100.0	31.0	--	--	--	--	--	--	--	
1901	0006	3	5	BOS	MAN	ND	1	R	?	8	7	E155.0	E100.0	57.5	--	E 31.0	60.5	--	--	--	--	--	--	
1901	0005	3	5	BOS	MAN	ND	1	L	?	A		E155.0	100.0	E 56.0	E117.5	33.0	59.0	--	--	--	--	--	--	
1922	0003	3	5	BOS	MAN	ND	1	R	?	8		--	--	--	--	35.0	--	--	--	--	--	--	--	
1941	0005	3	5	BOS	MAN	ND	1	L	?	A		--	--	56.5	--	--	--	--	--	--	--	--	--	
2129	0029	3	5	BOS	MAN	ND	1	L	?	?		--	--	--	--	28.5	--	--	--	--	--	--	--	
0822	0007	3	1	BOS	ATLAS	ND	1	M	?	?		--	82.5	--	--	--	--	--	--	--	--	--	--	
0182	0001	3	1	BOS	ATLAS	ND	1	M	?	8		--	93.0	--	--	--	--	--	--	--	--	--	--	
0886	0002	3	1	BOS	AXIS	ND	1	M	?	Y		--	--	E 87.5	46.0	--	30.5	--	--	--	--	--	--	
3711	0003	3	1	BOS	SCAP	ND	1	R	?	A		--	--	E 61.5	--	--	--	--	--	--	--	--	--	
3711	0001	3	1	BOS	SCAP	ND	1	L	?	A		60.0	71.0	62.5	53.5	54.0	E420.0	--	--	--	--	--	--	
3732	0009	3	1	BOS	SCAP	ND	1	L	?	?		41.8	--	--	--	--	--	--	--	--	--	--	--	
1933	0021	3	1	BOS	SCAP	ND	1	L	?	?		--	--	60.5	49.7	--	--	--	--	--	--	--	--	
2118	0007	3	1	BOS	SCAP	ND	1	L	?	Y		--	--	E 58.5	E 49.0	--	--	--	--	--	--	--	--	
0309	0001	3	1	BOS	HUMER	ND	1	R	?	8		90.5	81.7	40.4	--	--	--	--	--	--	--	--	--	
0362	0001	3	1	BOS	HUMER	ND	1	R	?	8		76.0	66.8	--	--	--	--	--	--	--	--	--	--	
3732	0003	3	1	BOS	HUMER	ND	1	R	?	8		E 88.0	83.0	--	--	--	--	--	--	--	--	--	--	
3732	0002	3	1	BOS	HUMER	ND	1	R	?	8		--	--	33.7	--	--	--	--	--	--	--	--	--	
0844	0001	3	1	BOS	HUMER	ND	1	R	?	8		--	71.4	--	--	--	--	--	--	--	--	--	--	
0720	0001	3	1	BOS	HUMER	ND	1	R	?	8		E 81.0	--	--	--	--	--	--	--	--	--	--	--	
1350	0002	3	1	BOS	HUMER	ND	1	L	?	8		E 99.0	--	--	--	--	--	--	--	--	--	--	--	
0654	0010	3	1	BOS	HUMER	ND	1	R	?	8		--	E 70.5	--	--	--	--	--	--	--	--	--	--	
1931	0002	3	1	BOS	HUMER	ND	1	L	?	?		--	E 69.0	--	--	--	--	--	--	--	--	--	--	
1934	0002	3	1	BOS	HUMER	ND	1	L	?	A		--	--	--	E122.5	--	--	--	--	--	--	--	--	
0182	0002	3	1	BOS	HUMER	ND	1	L	?	8		100.5	84.0	--	--	--	--	--	--	--	--	--	--	
0202	0001	3	1	BOS	HUMER	ND	1	R	?	8		85.0	78.0	37.3	--	--	--	--	--	--	--	--	--	
2108	0031	3	1	BOS	HUMER	ND	1	R	?	?		--	E 75.5	--	--	--	--	--	--	--	--	--	--	
2115	0025	3	1	BOS	HUMER	ND	1	R	?	?		83.1	--	--	--	--	--	--	--	--	--	--	--	
0749	0005	3	1	BOS	HUMER	ND	1	R	?	8		83.0	74.5	--	--	--	--	--	--	--	--	--	--	

KEY / IDENTIFICATION / CHARAC. / MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

LOC	BON	F	M	ANM	ELM	DOM	C	S	SX	A	B	C M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
0280	0009	3	1	BOS	RAD	NO	1	R	?	?		81.5	74.7	--	--	--	--	--	--	--	--	--	--	
3742	0001	3	1	BOS	RAD	NO	1	R	?M	A	9	99.9	88.1	E 47.9	--	--	--	--	--	--	--	--	--	
0698	0003	3	1	BOS	RAD	NO	1	R	?	A		69.8	59.3	--	--	--	--	--	--	--	--	--	--	
0698	0003	3	1	BOS	RAD	NO	1	R	?	A		69.8	59.3	--	--	--	--	--	--	--	--	--	--	
0731	0001	3	1	BOS	RAD	NO	1	R	?	8		7.6	88.1	--	--	--	--	--	--	--	--	--	--	
0745	0004	3	1	BOS	RAD	NO	1	R	?	8		86.7	76.3	--	--	--	--	--	--	--	--	--	--	
1916	0008	3	1	BOS	RAD	NO	1	R	?	8		--	74.5	--	--	--	--	--	--	--	--	--	--	
0814	0001	3	1	BOS	RAD	NO	1	R	?	8		92.4	81.8	E 54.0	--	--	--	--	--	--	--	--	--	
1930	0115	3	1	BOS	RAD	NO	1	L	?	8		81.3	73.0	--	--	--	--	--	--	--	--	--	--	
0201	0001	3	1	BOS	RAD	NO	1	R	?	?		E 82.0	78.5	--	--	--	--	--	--	--	--	--	--	
0731	0002	3	1	BOS	ULNA	NO	1	R	?	8		48.5	--	--	--	--	--	--	--	--	--	--	--	
0745	0010	3	1	BOS	ULNA	NO	1	L	?	?		52.7	--	--	--	--	--	--	--	--	--	--	--	
0814	0002	3	1	BOS	ULNA	NO	1	R	?	8		51.5	--	--	--	--	--	--	--	--	--	--	--	
0210	0002	3	1	BOS	ULNA	NO	1	R	?	5		46.9	E 62.3	--	--	--	--	--	--	--	--	--	--	
1941	0017	3	1	BOS	ULNA	NO	1	R	?	?		E 48.0	--	--	--	--	--	--	--	--	--	--	--	
0554	0002	3	1	BOS	C-RAD	NO	1	L	?	8		30.5	27.5	--	--	--	--	--	--	--	--	--	--	
0745	0008	3	1	BOS	C-RAD	NO	1	R	?	8		32.7	30.1	--	--	--	--	--	--	--	--	--	--	
0704	0002	3	1	BOS	C-RAD	NO	1	L	?	?		32.5	E 25.5	--	--	--	--	--	--	--	--	--	--	
0195	0005	3	1	BOS	C-RAD	NO	1	R	?	?		30.6	27.5	--	--	--	--	--	--	--	--	--	--	
1942	0009	3	1	BOS	C-RAD	NO	1	L	?	A		31.5	27.0	--	--	--	--	--	--	--	--	--	--	
2122	0015	3	1	BOS	C-RAD	NO	1	L	?	?		29.8	26.0	--	--	--	--	--	--	--	--	--	--	
1915	0034	3	1	BOS	C-INT	NO	1	R	?	?		30.3	26.2	--	--	--	--	--	--	--	--	--	--	
1924	0004	3	1	BOS	C-INT	NO	1	R	?	?		30.5	28.3	--	--	--	--	--	--	--	--	--	--	
1931	0004	3	1	BOS	C-INT	NO	1	L	?	8		27.3	27.8	--	--	--	--	--	--	--	--	--	--	
0195	0004	3	1	BOS	C-INT	NO	1	R	?	?		27.8	26.0	--	--	--	--	--	--	--	--	--	--	
0214	0063	3	1	BOS	C-INT	NO	1	L	?	?		26.5	--	--	--	--	--	--	--	--	--	--	--	
1942	0010	3	1	BOS	C-INT	NO	1	L	?	A		29.5	29.2	--	--	--	--	--	--	--	--	--	--	
2122	0014	3	1	BOS	C-INT	NO	1	L	?	?		27.7	26.1	--	--	--	--	--	--	--	--	--	--	
2128	0033	3	1	BOS	C-INT	NO	1	L	?	?		30.0	27.8	--	--	--	--	--	--	--	--	--	--	
1318	0008	3	1	BOS	C-ULN	NO	1	L	?	?		33.6	39.2	39.9	--	--	--	--	--	--	--	--	--	
1916	0017	3	1	BOS	C-ULN	NO	1	R	?	?		29.1	33.0	37.5	--	--	--	--	--	--	--	--	--	
1930	0116	3	1	BOS	C-ULN	NO	1	R	?	?		29.6	35.0	39.5	--	--	--	--	--	--	--	--	--	
1936	0040	3	1	BOS	C-ULN	NO	1	R	?	?		--	30.5	--	--	--	--	--	--	--	--	--	--	
1942	0011	3	1	BOS	C-ULN	NO	1	L	?	A		31.3	36.0	36.5	--	--	--	--	--	--	--	--	--	
2125	0014	3	1	BOS	C-ULN	NO	1	L	?	?		28.8	35.0	38.0	--	--	--	--	--	--	--	--	--	
0784	0003	3	1	BOS	C-4	NO	1	L	?	?		E 31.5	29.5	26.0	--	--	--	--	--	--	--	--	--	
0165	0001	3	1	BOS	C-4	NO	1	L	?	?		28.8	25.0	23.9	--	--	--	--	--	--	--	--	--	
2308	0069	3	1	BOS	C-4	NO	1	R	?	8		32.5	32.0	27.5	--	--	--	--	--	--	--	--	--	
0883	0008	3	1	BOS	C-4	NO	1	R	?	8		28.7	27.8	24.0	--	--	--	--	--	--	--	--	--	
0893	0005	3	1	BOS	C-4	NO	1	L	?	?		31.5	31.2	26.2	--	--	--	--	--	--	--	--	--	
2125	0013	3	1	BOS	C-4	NO	1	L	?	?		--	29.0	23.6	--	--	--	--	--	--	--	--	--	
3758	0023	3	1	BOS	C-2+3	NO	1	R	?	?		31.1	31.7	18.5	--	--	--	--	--	--	--	--	--	
0724	0006	3	1	BOS	C-2+3	NO	1	L	?	8		33.3	34.6	17.1	--	--	--	--	--	--	--	--	--	
0745	0007	3	1	BOS	C-2+3	NO	1	L	?	?		35.0	36.9	16.1	--	--	--	--	--	--	--	--	--	
0745	0012	3	1	BOS	C-2+3	NO	1	R	?	?		--	--	15.1	--	--	--	--	--	--	--	--	--	
1916	0016	3	1	BOS	C-2+3	NO	1	L	?	?		35.4	37.5	16.7	--	--	--	--	--	--	--	--	--	
1918	0064	3	1	BOS	C-2+3	NO	1	R	?	?		33.6	34.8	19.3	--	--	--	--	--	--	--	--	--	
0748	0009	3	1	BOS	C-2+3	NO	1	L	?	?		33.8	36.4	16.7	--	--	--	--	--	--	--	--	--	
0165	0002	3	1	BOS	C-2+3	NO	1	L	?	?		33.0	36.5	16.0	--	--	--	--	--	--	--	--	--	
0842	0007	3	1	BOS	C-2+3	NO	1	R	?	8		32.2	36.5	12.0	--	--	--	--	--	--	--	--	--	
2113	0052	3	1	BOS	C-2+3	NO	1	L	?	?		34.2	36.8	15.8	--	--	--	--	--	--	--	--	--	
0881	0012	3	1	BOS	C-2+3	NO	1	R	?	8		33.5	35.8	15.7	--	--	--	--	--	--	--	--	--	
2124	0004	3	1	BOS	C-2+3	NO	1	L	?	?		38.4	39.7	108.3	--	--	--	--	--	--	--	--	--	
0833	0010	3	1	BOS	C-2+3	NO	1	R	?	8		34.0	38.2	15.0	--	--	--	--	--	--	--	--	--	
0759	0002	3	1	BOS	MC3+4	NO	1	L	?	8		62.0	37.1	--	--	--	--	--	--	--	--	--	--	
0859	0001	3	1	BOS	MC3+4	NO	1	L	?	8		E 55.0	39.0	--	--	--	--	--	--	--	--	--	--	
0724	0005	3	1	BOS	MC3+4	NO	1	L	?	8		--	--	--	E 64.0	E 34.0	--	--	--	--	--	24.0	--	
0729	0008	3	1	BOS	MC3+4	NO	1	R	?	8		62.8	40.0	36.0	--	--	--	--	--	--	--	--	--	
1918	0058	3	1	BOS	MC3+4	NO	1	R	?	8		--	--	--	62.5	--	--	--	--	--	--	--	--	
1918	0057	3	1	BOS	MC3+4	NO	1	R	?	?		--	--	--	--	--	--	--	--	--	--	22.6	--	
1924	0003	3	1	BOS	MC3+4	NO	1	R	?	8		--	--	--	62.3	E 33.5	--	--	--	--	--	--	25.0	
0704	0001	3	1	BOS	MC3+4	NO	1	R	?	8		62.0	38.0	--	--	--	--	--	--	--	--	--	--	
1927	0001	3	1	BOS	MC3+4	NO	1	R	?	8		--	--	--	63.8	36.5	--	--	--	--	--	--	--	
0814	0003	3	1	BOS	MC3+4	NO	1	L	?	8		E 58.0	42.5	--	--	--	--	--	--	--	--	--	--	
1925	0005	3	1	BOS	MC3+4	NO	1	R	?	8		--	--	--	E 59.0	33.7	--	--	--	--	--	--	--	
1932	0030	3	1	BOS	MC3+4	NO	1	R	?F	8		--	--	--	64.5	36.4	--	--	--	--	--	25.7	--	
1932	0029	3	1	BOS	MC3+4	NO	1	L	?M	8		--	--	--	69.5	--	--	--	--	--	--	25.0	--	
1933	0004	3	1	BOS	MC3+4	NO	1	R	?	?		--	42.6	--	--	--	--	--	--	--	--	--	--	
1933	0005	3	1	BOS	MC3+4	NO	1	R	?	?		--	41.0	--	--	--	--	--	--	--	--	--	--	
1934	0006	3	1	BOS	MC3+4	NO	1	R	?	J		--	--	--	E 65.0	33.5	--	--	--	--	--	--	--	
0175	0003	3	1	BOS	MC3+4	NO	1	R	?	J		--	--	--	61.5	--	--	--	--	--	--	--	--	
0822	0008	3	1	BOS	MC3+4	NO	1	R	?	J		--	--	--	U 66.5	U 37.5	--	--	--	--	--	U 25.0	--	
0842	0008	3	1	BOS	MC3+4	NO	1	R	?	8		61.5	36.0	--	--	--	--	--	--	--	--	--	--	
1375	0003	3	1	BOS	MC3+4	NO	1	R	?	8		--	--	--	59.3	33.0	--	--	--	--	--	--	--	
1938	0030	3	1	BOS	MC3+4	NO	1	L	M	8		70.7	41.5	E 40.0	--	--	--	--	--	--	--	--	--	
0185	0014	3	1	BOS	MC3+4	NO	1	L	?	S	8	--	--	--	59.5	33.0	--	--	--	--	--	--	--	
2113	0054	3	1	BOS	MC3+4	NO	1	L	?	8		--	E 37.2	--	--	--	--	--	--	--	--	--	--	
2308	0068	3	1	BOS	MC3+4	NO	1	R	?	8		66.2	40.1	--	--	--	--	--	--	--	--	--	--	
1941	0012	3	1	BOS	MC3+4	NO	1	R	?	8		--	35.0	--	--	--	--	--	--	--	--	--	--	
2305	0008	3	1	BOS	MC3+4	NO	1	?	?	Y		--	--	--	U 66.5	U 39.5	--	--	--	--	--	--	--	
0701	0003	3	1	BOS	MC3+4	NO	1	R	?	8		57.3	40.0	--	--	--	--	--	--	--	--	--	--	
0180	0018	3	1	BOS	MC3+4	NO	1	L	?	8	9	--	--	--	--	E 75.0	E 40.0	--	--	--	--	--	27.5	
1353	0005	3	1	BOS	PH1AN	NO	1	4	?	8		E 63.0	37.6	E 37.0	30.5	--	--	--	--	--	--	--	--	
1355	0003	3	1	BOS	PH1AN	NO	1	R	?	8		E 61.5	37.7	E 36.8	31.2	--	--	--	--	--	--	--	--	
3771	0004	3	1	BOS	PH1AN	NO	1	4	?	8		--	30.5	--	--	--	--	--	--	--	--	--	--	
0673	0008	3	1	BOS	PH1AN	NO	1	R	?	8		E 64.2	33.5	32.5	27.4	--	--	--	--	--	--	--	--	
0705	0002	3	1	BOS	PH1AN	NO	1	R	?	8		60.6	E 33.2	34.5	30.0	--	--	--	--	--	--	--	--	
0729	0010	3	1	BOS	PH1AN	NO	1	L	?	8		65.5	E 32.0	32.5	28.5	--	--	--	--	--	--	--	--	
0792	0008	3	1	BOS	PH1AN	NO	1	5	?	8		60.7	35.0	--	30.0	--	--	--	--	--	--	--	--	
1930	0111	3	1	BOS	PH1AN	NO	1	4	?	8	4	--	36.5	--	--	--	--	--	--	--	--	--	--	
1932	0028	3	1	BOS	PH1AN	NO	1	L	?	8		64.5	34.0	34.1	27.8	--	--	--	--	--	--	--	--	
1933	0011	3	1	BOS	PH1AN	NO	1	L	?	?		63.0	36.0	33.3	31.0	--	--	--	--	--	--	--	--	
0161	0079	3	1	BOS	PH1AN	NO	1	L	?M	8		62.0	30.0	31.8	28.2	--	--	--	--	--	--	--	--	
0173	0001	3	1	BOS	PH1AN	NO	1	L	?	8		--	32.2	--	--	--	--	--	--	--	--	--	--	
0757	0007	3	1	BOS	PH1AN	NO	1	4	?	8		E 59.0	31.0	--	27.0	--	--	--	--	--	--	--	--	
0852	0001	3	1	BOS	PH1AN	NO	4	4	?	8		--	41.5	--	35.0	--	--	--	--	--	--	--	--	
0296	0016	3	1	BOS	PH2AN	NO	1	R	?	8		35.2	26.3	23.6	21.7	--	--	--	--	--	--	--	--	
3710	0028	3	1	BOS	PH2AN	NO	1	5	?	8		E 40.0	--	26.3	--	--	--	--	--	--	--	--	--	
1327	0016	3	1	BOS	PH2AN	NO	1	5	?	8		40.3	32.9	27.4	26.7	--	--	--	--	--	--	--	--	
0312	0004	3	1	BOS	PH2AN	NO	1	4	?	8		E 43.5	34.9	31.7	28.4	--	--	--	--	--	--	--	--	

KEY IDENTIFICATION CHARAC. MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

LOC	BON	F	M	ANM	ELM	DOM	C	S	SX	A	B	C M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
1343	0013	3	1	BOS	PH2AN	ND	1	5	?	8		42.8	31.6	--	26.7	--	--	--	--	--	--	--	--	
1358	0001	3	1	BOS	PH2AN	ND	1	5	?	8		44.4	34.5	E 30.7	29.4	--	--	--	--	--	--	--	--	
0801	0001	3	1	BOS	PH2AN	ND	1	L	?	8		E 41.4	32.0	26.0	24.7	--	--	--	--	--	--	--	--	
0859	0007	3	1	BOS	PH2AN	ND	1	5	?	8		E 39.0	29.0	E 26.5	25.7	--	--	--	--	--	--	--	--	
1915	0007	3	1	BOS	PH2AN	ND	1	4	?	8		46.8	34.1	31.3	27.0	--	--	--	--	--	--	--	--	
1915	0006	3	1	BOS	PH2AN	ND	1	4	?	8		--	33.8	--	29.5	--	--	--	--	--	--	--	--	
1916	0009	3	1	BOS	PH2AN	ND	1	4	?	8		E 42.5	34.2	32.2	29.5	--	--	--	--	--	--	--	--	
1918	0118	3	1	BOS	PH2AN	ND	1	4	?	8		38.2	--	E 25.6	24.0	--	--	--	--	--	--	--	--	
1918	0117	3	1	BOS	PH2AN	ND	1	4	?	8		--	33.2	--	29.0	--	--	--	--	--	--	--	--	
1914	0032	3	1	BOS	PH2AN	ND	1	5	?	8	6	42.2	32.0	26.2	24.1	--	--	--	--	--	--	--	--	
0171	0022	3	1	BOS	PH2AN	ND	1	5	?	8		45.5	35.3	31.0	27.9	--	--	--	--	--	--	--	--	
1930	0108	3	1	BOS	PH2AN	ND	1	5	?	8		47.5	36.2	32.4	27.5	--	--	--	--	--	--	--	--	
0159	0027	3	1	BOS	PH2AN	ND	1	L	?M	8		47.3	36.0	31.5	30.3	--	--	--	--	--	--	--	--	
1933	0012	3	1	BOS	PH2AN	ND	1	4	?	8		43.1	31.8	29.5	26.4	--	--	--	--	--	--	--	--	
0165	0003	3	1	BOS	PH2AN	ND	1	L	?	8		45.0	31.5	28.0	25.3	--	--	--	--	--	--	--	--	
0737	0002	3	1	BOS	PH2AN	ND	1	4	?	8		--	28.0	--	--	--	--	--	--	--	--	--	--	
1935	0024	3	1	BOS	PH2AN	ND	1	5	?	?		E 41.5	31.2	E 28.5	25.3	--	--	--	--	--	--	--	--	
0206	0004	3	1	BOS	PH2AN	ND	1	L	?	5		44.6	34.0	E 28.0	27.5	--	--	--	--	--	--	--	--	
0889	0002	3	1	BOS	PH2AN	ND	1	4	?	8		41.3	30.0	27.5	24.5	--	--	--	--	--	--	--	--	
2129	0032	3	1	BOS	PH2AN	ND	1	R	M	A		50.5	42.6	40.9	38.6	--	--	--	--	--	--	--	--	
0180	0019	3	1	BOS	PH2AN	ND	1	4	?	8	?	E 40.5	--	27.5	--	--	--	--	--	--	--	--	--	
0720	0005	3	1	BOS	PH3AN	ND	1	R	?	8		80.0	59.1	37.4	--	--	--	--	--	--	--	--	--	
2113	0055	3	1	BOS	PH?AN	ND	1	5	?	8		83.5	62.1	36.8	--	--	--	--	--	--	--	--	--	
1903	0004	3	1	BOS	PELV	ND	1	R	M	8	8	82.5	E 58.5	--	--	--	--	--	--	--	--	--	--	
1903	0003	3	1	BOS	PELV	ND	1	R	F	8	8	74.5	55.0	--	--	--	--	--	--	--	--	--	--	
1906	0001	3	1	BOS	PELV	ND	1	R	M	8	7	74.5	56.0	--	--	--	--	--	--	--	--	--	--	
1905	0018	3	1	BOS	PELV	ND	1	R	?F	S	7	72.0	52.0	--	--	--	--	--	--	--	--	--	--	
0213	0001	3	1	BOS	PELV	ND	1	R	F	8		E 65.0	53.5	--	--	--	--	--	--	--	--	--	--	
2116	0001	3	1	BOS	PELV	ND	1	R	F	8		66.5	54.0	--	--	--	--	--	--	--	--	--	--	
1374	0003	3	1	BOS	IL/IS	ND	1	R	?	?		E 76.0	--	--	--	--	--	--	--	--	--	--	--	
0701	0002	3	1	BOS	IL/IS	ND	1	L	?F	8		E 72.5	--	--	--	--	--	--	--	--	--	--	--	
0815	0005	3	1	BOS	FEMUR	ND	1	L	?	Y		--	U 51.2	--	--	--	--	--	--	--	--	--	--	
1374	0001	3	1	BOS	FEMUR	ND	1	R	?	8		--	41.0	--	--	--	--	--	--	--	--	--	--	
2111	0025	3	1	BOS	FEMUR	ND	1	L	?	8		--	49.3	--	--	--	--	--	--	--	--	--	--	
0701	0004	3	1	BOS	FEMUR	ND	1	L	?	S		--	47.7	--	--	--	--	--	--	--	--	--	--	
2124	0016	3	1	BOS	FEMUR	ND	1	L	?	8		--	49.0	--	--	--	--	--	--	--	--	--	--	
0849	0020	3	1	BOS	PATEL	ND	1	R	?	8		74.0	--	45.2	--	--	--	--	--	--	--	--	--	
2117	0010	3	1	BOS	PATEL	ND	1	R	?	8		66.0	E 50.5	38.0	--	--	--	--	--	--	--	--	--	
3712	0001	3	1	BOS	TIBIA	ND	1	L	?	8		--	E 40.0	65.4	51.5	--	--	--	--	--	--	--	--	
3722	0016	3	1	BOS	TIBIA	ND	1	L	?	8		--	--	E 57.5	E 46.0	--	--	--	--	--	--	--	--	
1908	0022	3	1	BOS	TIBIA	ND	1	R	?	8		--	--	E 75.0	--	--	--	--	--	--	--	--	--	
1915	0008	3	1	BOS	TIBIA	ND	1	R	?	8		--	--	66.4	48.5	--	--	--	--	--	--	--	--	
0717	0002	3	1	BOS	TIBIA	ND	1	R	?	8		--	--	65.8	--	--	--	--	--	--	--	--	--	
1934	0003	3	1	BOS	TIBIA	ND	1	R	?	8		--	--	63.0	E 49.0	--	--	--	--	--	--	--	--	
2111	0022	3	1	BOS	TIBIA	ND	1	L	?	J		--	--	62.5	E 46.6	--	--	--	--	--	--	--	--	
0847	0007	3	1	BOS	TIBIA	ND	1	L	?	8		--	--	62.1	47.3	--	--	--	--	--	--	--	--	
0309	0003	3	1	BOS	MALL	ND	1	R	?	8		35.3	27.2	--	--	--	--	--	--	--	--	--	--	
3712	0003	3	1	BOS	MALL	ND	1	L	?	8		33.3	--	--	--	--	--	--	--	--	--	--	--	
1908	0023	3	1	BOS	MALL	ND	1	R	?	8		38.7	25.5	--	--	--	--	--	--	--	--	--	--	
1915	0025	3	1	BOS	MALL	ND	1	L	?	?		34.3	22.8	--	--	--	--	--	--	--	--	--	--	
0167	0014	3	1	BOS	MALL	ND	1	L	?	?		42.5	26.2	--	--	--	--	--	--	--	--	--	--	
1923	0002	3	1	BOS	MALL	ND	1	R	?	8		42.2	28.5	--	--	--	--	--	--	--	--	--	--	
0159	0030	3	1	BOS	MALL	ND	1	L	?	8		36.3	24.7	--	--	--	--	--	--	--	--	--	--	
1936	0039	3	1	BOS	MALL	ND	1	R	?	?		38.8	24.5	--	--	--	--	--	--	--	--	--	--	
2101	0003	3	1	BOS	MALL	ND	1	L	?	?		32.8	23.5	--	--	--	--	--	--	--	--	--	--	
1911	0001	3	1	BOS	TALUS	ND	1	L	?	?		74.7	--	41.7	--	--	49.0	--	--	--	--	--	--	
0309	0004	3	1	BOS	TALUS	ND	1	R	?	8		--	67.1	--	--	44.4	--	--	--	--	--	--	--	
0295	0001	3	1	BOS	TALUS	ND	1	L	?	?		68.4	--	38.5	--	--	--	--	--	--	--	--	--	
3712	0002	3	1	BOS	TALUS	ND	1	L	?	8		68.9	65.7	39.7	--	43.5	40.0	--	--	--	--	--	--	
3732	0011	3	1	BOS	TALUS	ND	1	L	?	A		70.5	67.5	40.0	--	47.7	41.7	--	--	--	--	--	--	
3316	0012	3	1	BOS	TALUS	ND	1	L	?	6		E 62.5	58.0	33.0	--	38.0	34.5	--	--	--	--	--	--	
1345	0001	3	1	BOS	TALUS	ND	1	R	?	?		--	77.5	--	--	--	--	--	--	--	--	--	--	
1347	0007	3	1	BOS	TALUS	ND	1	L	?	?		E 66.0	E 61.0	E 35.0	--	--	--	--	--	--	--	--	--	
1365	0001	3	1	BOS	TALUS	ND	1	L	?	8		75.5	68.4	41.0	--	50.6	46.0	--	--	--	--	--	--	
0699	0002	3	1	BOS	TALUS	ND	1	L	?	?		E 66.0	--	E 38.0	--	41.2	--	--	--	--	--	--	--	
0705	0001	3	1	BOS	TALUS	ND	1	R	?	?		--	--	--	--	49.3	--	--	--	--	--	--	--	
0710	0003	3	1	BOS	TALUS	ND	1	L	?	8		77.8	71.8	45.5	--	52.0	--	--	--	--	--	--	--	
0796	0007	3	1	BOS	TALUS	ND	1	R	?	?		--	--	--	--	--	43.8	--	--	--	--	--	--	
0846	0003	3	1	BOS	TALUS	ND	1	L	?	?		E 68.0	64.3	38.0	--	E 40.7	42.5	--	--	--	--	--	--	
0858	0001	3	1	BOS	TALUS	ND	1	R	?	?		--	--	--	--	--	44.2	--	--	--	--	--	--	
1350	0001	3	1	BOS	TALUS	ND	1	L	?	?		75.6	68.6	42.7	--	49.3	46.0	--	--	--	--	--	--	
1916	0011	3	1	BOS	TALUS	ND	1	L	?	8		E 72.5	--	41.0	--	E 42.0	45.5	--	--	--	--	--	--	
1918	0056	3	1	BOS	TALUS	ND	1	R	?	8		70.2	65.8	41.3	--	44.7	42.8	--	--	--	--	--	--	
1918	0055	3	1	BOS	TALUS	ND	1	R	?	8		69.8	64.8	40.6	--	44.1	42.3	--	--	--	--	--	--	
0728	0006	3	1	BOS	TALUS	ND	1	R	?	?		E 69.0	65.2	38.0	--	E 39.0	41.2	--	--	--	--	--	--	
0843	0002	3	1	BOS	TALUS	ND	1	R	?	8		71.5	E 66.5	41.5	--	E 46.0	44.2	--	--	--	--	--	--	
0727	0003	3	1	BOS	TALUS	ND	1	R	?	?		66.6	62.4	--	--	40.7	--	--	--	--	--	--	--	
0717	0009	3	1	BOS	TALUS	ND	1	P	?	?		70.7	56.8	41.5	--	45.0	43.0	--	--	--	--	--	--	
1923	0003	3	1	BOS	TALUS	ND	1	R	?	8		--	--	44.0	--	52.6	--	--	--	--	--	--	--	
0159	0031	3	1	BOS	TALUS	ND	1	L	?	8		70.6	65.5	40.7	--	45.8	45.1	--	--	--	--	--	--	
0159	0033	3	1	BOS	TALUS	ND	1	L	?	8		E 72.0	68.8	40.2	--	45.2	45.7	--	--	--	--	--	--	
0171	0021	3	1	BOS	TALUS	ND	1	L	?	?		71.8	65.8	39.5	--	44.5	43.3	--	--	--	--	--	--	
0794	0007	3	1	BOS	TALUS	ND	1	R	?	?		--	--	--	--	41.1	--	--	--	--	--	--	--	
1930	0107	3	1	BOS	TALUS	ND	1	R	?	?		E 72.5	64.9	43.0	--	50.5	45.0	--	--	--	--	--	--	
1931	0012	3	1	BOS	TALUS	ND	1	R	?	?	6	--	67.7	--	--	47.0	--	--	--	--	--	--	--	
0195	0010	3	1	BOS	TALUS	ND	1	R	?	8		E 67.5	62.7	38.6	--	E 43.0	41.2	--	--	--	--	--	--	
0198	0035	3	1	BOS	TALUS	ND	1	R	?	8		71.8	67.4	40.3	--	45.3	41.2	--	--	--	--	--	--	
2109	0001	3	1	BOS	TALUS	ND	1	R	?	?		--	67.0	E 40.2	--	48.2	--	--	--	--	--	--	--	
2309	0036	3	1	BOS	TALUS	ND	1	R	?	8	7	74.1	68.8	42.0	--	48.0	45.6	--	--	--	--	--	--	
2309	0039	3	1	BOS	TALUS	ND	1	L	?	8	7	75.8	72.6	43.0	--	50.0	46.0	--	--	--	--	--	--	
0883	0004	3	1	BOS	TALUS	NG	1	R	?	?		--	68.0	--	--	--	--	--	--	--	--	--	--	
0701	0006	3	1	BOS	TALUS	ND	1	L	?	?		68.7	67.3	--	--	47.5	E 47.0	--	--	--	--	--	--	
0852	0002	3	1	BOS	TALUS	ND	1	L	?	?		73.2	68.7	42.0	--	46.0	45.5	--	--	--	--	--	--	
2123	0008	3	1	BOS	TALUS	ND	1	R	?	?		68.3	63.6	38.8	--	46.0	43.0	--	--	--	--	--	--	
2128	0032	3	1	BOS	TALUS	ND	1	L	?	?		71.5	--	41.0	--	45.0	--	--	--	--	--	--	--	
0827	0001	3	1	BOS	TALUS	ND	1	R	?	?		--	--	--	--	46.7	--	--	--	--	--	--	--	
0534	0004	3	1	BOS	CALC	ND	1	R	?	?		--	19.7	52.5	--	--	--	--	--	--	--	--	--	
3732	0010	3	1	BOS	CALC	ND	1	L	?	A		--	43.5	E 55.0	--	--	E 54.0	--	--	--	--	--	--	
1370	0001	3	1	BOS	CALC	ND	1	R	?	8		E132.5	--	55.2	--	--	--	--	--	--	--	--	--	
0698	0004	3	1	BOS	CALC	ND	1	L	?	?		--	44.4	56.0	--	--	48.5	--	--	--	--	--	--	

KEY IDENTIFICATION CHARAC. MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

LOC	BON	F	M	ANM	ELM	DOM	C	S	SX	A	B	C M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
0729	0006	3	1	BOS	CALC	ND	1	L	?	?		--	42.8	52.6	--	--	--	--	--	--	--	--	--	
0729	0006	3	1	BOS	CALC	ND	1	L	?	?		--	42.8	52.6	--	--	--	--	--	--	--	--	--	
0159	0029	3	1	BOS	CALC	ND	1	L	?	8		--	--	56.0	--	--	--	--	--	--	--	--	--	
1935	0022	3	1	BOS	CALC	ND	1	L	?	?		--	E 44.5	--	--	--	--	--	--	--	--	--	--	
0195	0011	3	1	BOS	CALC	ND	1	R	?	8		--	43.0	--	--	--	--	--	--	--	--	--	--	
2107	0001	3	1	BOS	CALC	ND	1	R	?	8		--	46.3	E 57.0	--	--	57.5	--	--	--	--	--	--	
2309	0037	3	1	BOS	CALC	ND	1	R	?	8	7	--	E 42.0	55.3	--	--	--	--	--	--	--	--	--	
1941	0014	3	1	BOS	CALC	ND	1	L	?	8		--	42.9	E 55.0	--	--	--	--	--	--	--	--	--	
3766	0042	3	1	BOS	T-C+4	ND	1	L	?	?		54.5	--	--	--	--	--	--	--	--	--	--	--	
0729	0009	3	1	BOS	T-C+4	ND	1	R	?	8		55.8	--	--	--	--	--	--	--	--	--	--	--	
1918	0052	3	1	BOS	T-C+4	ND	1	L	?	8		57.8	--	--	--	--	--	--	--	--	--	--	--	
1938	0025	3	1	BOS	T-C+4	ND	1	R	?	?		61.2	--	--	--	--	--	--	--	--	--	--	--	
0194	0004	3	1	BOS	T-C+4	ND	1	R	?	Y		57.5	--	--	--	--	--	--	--	--	--	--	--	
0195	0012	3	1	BOS	T-C+4	ND	1	R	?	8		56.8	--	--	--	--	--	--	--	--	--	--	--	
2309	0038	3	1	BOS	T-C+4	ND	1	R	?	8	7	60.0	--	--	--	--	--	--	--	--	--	--	--	
2112	0052	3	1	BOS	T-C+4	ND	1	L	?	8		57.2	--	--	--	--	--	--	--	--	--	--	--	
0701	0007	3	1	BOS	T-C+4	ND	1	L	?	?		55.2	--	--	--	--	--	--	--	--	--	--	--	
2122	0004	3	1	BOS	T-C+4	ND	1	L	?	8		57.8	--	--	--	--	--	--	--	--	--	--	--	
1338	0014	3	1	BOS	T-2+3	ND	1	L	?	?		34.2	20.4	11.0	--	--	--	--	--	--	--	--	--	
0759	0009	3	1	BOS	T-2+3	ND	1	R	?	?		40.0	25.0	10.0	--	--	--	--	--	--	--	--	--	
1918	0053	3	1	BOS	T-2+3	ND	1	L	?	8		35.3	22.5	10.5	--	--	--	--	--	--	--	--	--	
1918	0063	3	1	BOS	T-2+3	ND	1	R	?	?		--	21.0	10.5	--	--	--	--	--	--	--	--	--	
0171	0008	3	1	BOS	T-2+3	ND	1	R	?	A		50.5	27.5	11.5	--	--	--	--	--	--	--	--	--	
1938	0026	3	1	BOS	T-2+3	ND	1	R	?	?		41.6	24.5	13.2	--	--	--	--	--	--	--	--	--	
0195	0013	3	1	BOS	T-2+3	ND	1	R	?	8		36.8	32.7	10.0	--	--	--	--	--	--	--	--	--	
2126	0029	3	1	BOS	T-2+3	ND	1	L	?	8		37.3	24.3	--	--	--	--	--	--	--	--	--	--	
0399	0045	3	1	BOS	MT3+4	ND	1	R	?	8		--	--	--	--	E 51.0	32.6	--	--	--	--	--	--	
3728	0002	3	1	BOS	MT3+4	ND	1	R	?	8		45.3	43.4	42.9	--	--	--	--	--	--	--	--	--	
1348	0001	3	1	BOS	MT3+4	ND	1	R	?	?		--	51.1	--	--	--	--	--	--	--	--	--	--	
0800	0001	3	1	BOS	MT3+4	ND	1	R	?	8		--	--	--	--	59.3	32.5	--	--	--	--	--	26.0	
0698	0006	3	1	BOS	MT3+4	ND	1	?	?	8		--	--	--	--	E 53.5	E 32.2	--	--	--	--	--	--	
0699	0001	3	1	BOS	MT3+4	ND	1	R	?	8		51.6	50.7	47.5	--	--	--	--	--	--	--	--	--	
0729	0007	3	1	BOS	MT3+4	ND	1	R	?	8		--	--	--	--	56.8	33.0	--	--	--	--	--	E 28.5	
0853	0003	3	1	BOS	MT3+4	ND	1	?	?	8		--	--	--	--	E 57.5	E 34.0	--	--	--	--	--	--	
1918	0054	3	1	BOS	MT3+4	ND	1	L	?	8		--	--	48.8	--	--	--	--	--	--	--	--	--	
1922	0002	3	1	BOS	MT3+4	ND	1	R	?	8		--	--	--	--	E 74.0	38.0	--	--	--	--	--	33.5	
0843	0003	3	1	BOS	MT3+4	ND	1	L	?	8		--	49.3	47.0	--	--	--	--	--	--	--	--	--	
0746	0004	3	1	BOS	MT3+4	ND	1	R	?	8		--	50.0	--	--	--	--	--	--	--	--	--	--	
0717	0001	3	1	[illegible]	[illegible]	ND	1	L	?	?		50.5	50.5	48.2	--	--	--	--	--	--	--	--	--	
0794	0006	3	1	[illegible]	[illegible]	ND	1	L	?	?		--	E 47.0	E 51.0	--	--	--	--	--	--	--	--	--	
1930	0110	3	1	[illegible]	[illegible]3+4	ND	1	R	?	8		--	--	--	--	65.2	35.5	--	--	--	--	--	--	
1932	0027	3	1	[illegible]	[illegible]T3+4	ND	1	R	?M	8		56.5	55.3	53.5	--	--	--	--	--	--	--	--	--	
1932	0031	3	1	BOS	MT3+4	ND	1	L	?F	8		--	--	--	--	55.0	34.0	--	--	--	--	--	--	
1933	0001	3	1	BOS	MT3+4	ND	1	L	?	8		51.8	49.3	49.7	--	--	--	--	--	--	--	--	--	
0170	0004	3	1	BOS	MT3+4	ND	1	R	?M	8		59.3	56.9	58.3	--	--	--	--	--	--	--	--	--	
1935	0023	3	1	BOS	MT3+4	ND	1	R	?	Y		--	--	--	--	U 59.0	U 35.0	--	--	--	--	--	--	
0194	0003	3	1	BOS	MT3+4	ND	1	R	?	Y		51.5	48.9	49.9	--	--	--	--	--	--	--	--	--	
0184	0001	3	1	BOS	MT3+4	ND	1	L	?	8		--	--	--	--	67.8	38.2	--	--	--	--	--	--	
0195	0015	3	1	BOS	MT3+4	ND	1	R	?	8		52.0	50.5	49.2	--	--	--	--	--	--	--	--	--	
2103	0001	3	1	BOS	MT3+4	ND	1	L	?	J		--	--	--	--	61.6	E 36.2	--	--	--	--	--	--	
2305	0009	3	1	BOS	MT3+4	ND	1	R	?	I		--	--	--	--	U 53.5	U 33.2	--	--	--	--	--	U 24.0	
2305	0010	3	1	BOS	MT3+4	ND	1	R	F	A		--	--	--	E 27.5	P 61.0	32.3	--	--	--	--	--	25.6	
0889	0003	3	1	BOS	MT3+4	ND	1	R	?	8		--	--	--	--	54.2	32.4	--	--	--	--	--	--	
0831	0004	3	1	BOS	MT3+4	ND	1	L	?	8		--	--	--	--	E 55.0	--	--	--	--	--	--	26.8	
2128	0035	3	1	BOS	MT3+4	ND	1	L	?	8		--	--	--	--	68.5	E 36.4	--	--	--	--	--	--	
0304	0001	3	1	BOS	PH1PS	ND	1	L	?	8		59.7	29.4	27.3	26.1	--	--	--	--	--	--	--	--	
0468	0013	3	1	BOS	PH1PS	ND	1	L	?	8		60.3	28.1	27.1	24.0	--	--	--	--	--	--	--	--	
3745	0033	3	1	BOS	PH1PS	ND	1	L	?	S		58.0	29.0	E 25.0	24.5	--	--	--	--	--	--	--	--	
1901	0014	3	1	BOS	PH1PS	ND	1	R	?	8		62.0	E 29.0	27.0	23.0	--	--	--	--	--	--	--	--	
1904	0002	3	1	BOS	PH1PS	ND	1	R	?	8		62.7	30.0	26.6	24.8	--	--	--	--	--	--	--	--	
1345	0002	3	1	BOS	PH1PS	ND	4	5	?	8		--	--	31.2	--	--	--	--	--	--	--	--	--	
1348	0002	3	1	BOS	PH1PS	ND	1	R	?	8		54.8	25.5	24.1	20.3	--	--	--	--	--	--	--	--	
1357	0003	3	1	BOS	PH1PS	ND	1	R	?	8		65.0	32.3	30.2	27.9	--	--	--	--	--	--	--	--	
0311	0007	3	1	BOS	PH1PS	ND	1	L	?	8		62.1	29.5	30.0	25.0	--	--	--	--	--	--	--	--	
0770	0002	3	1	BOS	PH1PS	ND	1	R	?	8		58.0	28.3	27.4	24.3	--	--	--	--	--	--	--	--	
0698	0007	3	1	BOS	PH1PS	ND	1	5	?	8		65.5	30.8	E 28.9	26.2	--	--	--	--	--	--	--	--	
0720	0004	3	1	BOS	PH1PS	ND	1	L	?	8		61.7	27.8	30.1	24.8	--	--	--	--	--	--	--	--	
0849	0019	3	1	BOS	PH1PS	ND	1	R	?	8		63.9	31.0	30.2	25.9	--	--	--	--	--	--	--	--	
1917	0001	3	1	BOS	PH1PS	ND	1	L	?	8		E 64.0	27.5	29.7	24.5	--	--	--	--	--	--	--	--	
0747	0009	3	1	BOS	PH1PS	ND	1	L	?	8		64.2	30.0	29.8	26.8	--	--	--	--	--	--	--	--	
0159	0036	3	1	BOS	PH1PS	ND	1	L	?	8		55.8	27.3	26.5	22.5	--	--	--	--	--	--	--	--	
1930	0117	3	1	BOS	PH1PS	ND	1	5	?	8		69.5	E 34.5	--	--	--	--	--	--	--	--	--	--	
1936	0036	3	1	BOS	PH1PS	ND	1	R	?	8		64.1	31.3	29.5	25.5	--	--	--	--	--	--	--	--	
0183	0001	3	1	BOS	PH1PS	ND	1	R	?	8		63.2	29.3	29.7	24.5	--	--	--	--	--	--	--	--	
0194	0002	3	1	BOS	PH1PS	ND	1	R	?	8		65.5	31.1	33.0	25.8	--	--	--	--	--	--	--	--	
0214	0060	3	1	BOS	PH1PS	ND	1	L	?	8		--	29.0	--	--	--	--	--	--	--	--	--	--	
3718	0019	3	1	BOS	PH2PS	ND	1	4	?	8		E 37.5	28.0	25.9	23.0	--	--	--	--	--	--	--	--	
3737	0014	3	1	BOS	PH2PS	ND	1	4	?	8		41.0	29.7	24.2	22.6	--	--	--	--	--	--	--	--	
0736	0012	3	1	BOS	PH2PS	ND	1	4	?	8		--	E 31.0	--	--	--	--	--	--	--	--	--	--	
1321	0001	3	1	BOS	PH2PS	ND	1	5	?	8		46.2	36.5	E 30.0	29.5	--	--	--	--	--	--	--	--	
1904	0003	3	1	BOS	PH2PS	ND	1	4	?	8		E 44.0	28.0	E 25.0	25.0	--	--	--	--	--	--	--	--	
1334	0001	3	1	BOS	PH2PS	ND	1	5	?	?		36.4	--	--	--	--	--	--	--	--	--	--	--	
1355	0004	3	1	BOS	PH2PS	ND	1	5	?	8		46.0	32.0	27.4	26.5	--	--	--	--	--	--	--	--	
0808	0001	3	1	BOS	PH2PS	ND	1	4	?	8		48.1	36.3	28.3	27.1	--	--	--	--	--	--	--	--	
1910	0014	3	1	BOS	PH2PS	ND	1	5	?	S		41.2	27.9	23.6	23.4	--	--	--	--	--	--	--	--	
1916	0010	3	1	BOS	PH2PS	ND	1	5	?	8		46.2	35.3	29.5	27.5	--	--	--	--	--	--	--	--	
1928	0001	3	1	BOS	PH2PS	ND	1	4	?	8		45.1	34.6	30.2	28.9	--	--	--	--	--	--	--	--	
0747	0010	3	1	BOS	PH2PS	ND	1	L	?	8		47.8	35.2	28.0	26.8	--	--	--	--	--	--	--	--	
0746	0001	3	1	BOS	PH2PS	ND	1	4	?	8		44.2	30.3	25.7	24.9	--	--	--	--	--	--	--	--	
0171	0023	3	1	BOS	PH2PS	ND	1	5	?	8		39.6	26.7	23.1	22.6	--	--	--	--	--	--	--	--	
0171	0024	3	1	BOS	PH2PS	ND	1	5	?	8		41.6	30.7	25.2	24.5	--	--	--	--	--	--	--	--	
1925	0001	3	1	BOS	PH2PS	ND	1	4	?	A		43.2	35.2	29.6	P 28.0	--	--	--	--	--	--	--	--	
0159	0026	3	1	BOS	PH2PS	ND	1	L	?	?		43.0	32.0	26.0	24.5	--	--	--	--	--	--	--	--	
1933	0013	3	1	BOS	PH2PS	ND	1	5	?	?		42.5	30.5	28.2	26.7	--	--	--	--	--	--	--	--	
1936	0037	3	1	BOS	PH2PS	ND	1	5	?	8		43.4	31.7	--	23.5	--	--	--	--	--	--	--	--	
0182	0003	3	1	BOS	PH2PS	ND	1	L	?	8		47.2	34.4	[illegible]	27.1	--	--	--	--	--	--	--	--	
0839	0001	3	1	BOS	PH2PS	ND	1	4	?	A		44.8	36.2	31.2	29.5	--	--	--	--	--	--	--	--	
1941	0016	3	1	BOS	PH2PS	ND	1	4	?	8		43.3	34.1	29.5	27.5	--	--	--	--	--	--	--	--	
2117	0006	3	1	BOS	PH2PS	ND	1	5	?	J		45.4	29.8	26.6	25.0	--	--	--	--	--	--	--	--	
0160	0018	3	1	BOS	PH2PS	ND	1	4	?	8		45.5	34.0	29.2	28.2	--	--	--	--	--	--	--	--	

KEY IDENTIFICATION CHARAC. MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

LOC	BON	F	M	ANM	ELM	DOM	C	S	SX	A B	C M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
1317	0007	3	1	BOS	PH3PS	ND	4	5	?	8	62.8	50.8	31.4	--	--	--	--	--	--	--	--	--	
1931	0006	3	1	BOS	MP3+4	ND	1	?	?	J	--	--	--	U 70.0	U 39.0	--	--	--	--	--	--	--	
0214	0059	3	1	BOS	MP3+4	ND	1	L	?	8	--	--	--	61.7	--	--	--	--	--	--	--	--	
0318	0003	3	1	BOS	PH1	ND	1	5	?	8	62.0	E 28.5	E 28.0	25.5	--	--	--	--	--	--	--	--	
1360	0001	3	1	BOS	PH1	ND	1	4	?	8	E 59.8	E 28.5	29.5	25.4	--	--	--	--	--	--	--	--	
1356	0001	3	1	BOS	PH1	ND	1	5	?	?	E 60.0	--	E 28.5	--	--	--	--	--	--	--	--	--	
1362	0001	3	1	BOS	PH1	ND	1	5	?	8	E 66.0	--	E 30.3	--	--	--	--	--	--	--	--	--	
0311	0008	3	1	BOS	PH1	ND	1	5	?	8	--	--	E 29.5	--	--	--	--	--	--	--	--	--	
0756	0005	3	1	BOS	PH1	ND	1	4	?	?	E 62.8	E 31.5	E 29.2	27.3	--	--	--	--	--	--	--	--	
0756	0006	3	1	BOS	PH1	ND	1	5	?	?	E 61.7	E 29.0	26.6	25.6	--	--	--	--	--	--	--	--	
0761	0001	3	1	BOS	PH1	ND	1	5	?	8	69.8	--	33.0	29.2	--	--	--	--	--	--	--	--	
0729	0011	3	1	BOS	PH1	ND	1	4	?	?	--	--	27.1	--	--	--	--	--	--	--	--	--	
0745	0009	3	1	BOS	PH1	ND	1	5	?	?	--	33.8	--	--	--	--	--	--	--	--	--	--	
1915	0010	3	1	BOS	PH1	ND	1	5	?	S	65.9	--	29.4	--	--	--	--	--	--	--	--	--	
1916	0012	3	1	BOS	PH1	ND	1	4	?	8	--	--	35.0	--	--	--	--	--	--	--	--	--	
1918	0114	3	1	BOS	PH1	ND	1	4	?	8	--	--	29.4	24.6	--	--	--	--	--	--	--	--	
1918	0114	3	1	BOS	PH1	ND	1	4	?	8	--	--	29.4	24.6	--	--	--	--	--	--	--	--	
1918	0115	3	1	BOS	PH1	ND	1	4	?	8	58.1	29.0	27.2	23.0	--	--	--	--	53.1	--	--	--	
1922	0001	3	1	BOS	PH1	ND	1	4	?	8	E 63.5	30.8	--	25.5	--	--	--	--	--	--	--	--	
0747	0008	3	1	BOS	PH1	ND	1	4	?	8	--	--	32.2	--	--	--	--	--	--	--	--	--	
0820	0001	3	1	BOS	PH1	ND	1	5	?	8	E 62.5	28.4	--	--	--	--	--	--	--	--	--	--	
0159	0022	3	1	BOS	PH1	ND	1	5	?	8	67.5	--	--	--	--	--	--	--	--	--	--	--	
1376	0002	3	1	BOS	PH1	ND	1	5	?	8	66.3	--	31.0	27.0	--	--	--	--	--	--	--	--	
0192	0001	3	1	BOS	PH1	ND	1	5	?	8	65.8	E 27.8	E 29.3	26.8	--	--	--	--	--	--	--	--	
0816	0004	3	1	BOS	PH1	ND	1	5	?	8	66.6	E 35.0	E 32.5	E 31.0	--	--	--	--	--	--	--	--	
2117	0012	3	1	BOS	PH1	ND	1	5	?	6	E 60.0	--	28.2	27.0	--	--	--	--	--	--	--	--	
2118	0005	3	1	BOS	PH1	ND	1	4	?	6	E 60.7	E 27.6	25.7	23.0	--	--	--	--	--	--	--	--	
0756	0004	3	1	BOS	PH2	ND	1	5	?	?	E 43.5	31.4	25.8	25.8	--	--	--	--	--	--	--	--	
0805	0007	3	1	BOS	PH2	ND	1	4	?	8	--	E 29.0	--	28.3	--	--	--	--	--	--	--	--	
1916	0013	3	1	BOS	PH2	ND	1	4	?	J	--	29.2	--	--	--	--	--	--	--	--	--	--	
2125	0012	3	1	BOS	PH2	ND	1	5	?	8	--	--	30.3	--	--	--	--	--	--	--	--	--	
0279	0033	3	1	BOS	PH3	ND	1	5	?	8	74.5	55.5	35.0	--	--	--	--	--	--	--	--	--	
1304	0002	3	1	BOS	PH3	ND	1	4	?	?	71.0	E 51.0	E 32.5	27.0	--	--	--	--	--	--	--	--	
0731	0006	3	1	BOS	PH3	ND	1	4	?	8	74.9	--	--	--	--	--	--	--	--	--	--	--	
1915	0009	3	1	BOS	PH3	ND	1	4	?	8	E 80.0	70.2	E 43.5	E 28.5	--	--	--	--	--	--	--	--	
0728	0007	3	1	BOS	PH3	ND	1	4	?	?	66.0	52.0	23.5	22.0	--	--	--	--	--	--	--	--	
0795	0007	3	1	BOS	PH3	ND	1	5	?	8	E 90.0	--	43.5	30.5	--	--	--	--	--	--	--	--	
1921	0008	3	1	BOS	PH3	ND	1	4	?	8	88.0	66.0	44.0	31.5	--	--	--	--	--	--	--	--	
1923	0013	3	1	BOS	PH3	ND	1	5	?	?	--	--	E 33.0	23.7	--	--	--	--	--	--	--	--	
1923	0012	3	1	BOS	PH3	ND	1	4	?	?	--	56.0	--	23.1	--	--	--	--	--	--	--	--	
0159	0032	3	1	BOS	PH3	ND	1	5	?	8	--	--	34.4	--	--	--	--	--	--	--	--	--	
0159	0288	3	1	BOS	PH3	ND	1	4	?M	8	--	--	35.9	--	--	--	--	--	--	--	--	--	
0170	0003	3	1	BOS	PH3	ND	1	5	?M	8	--	--	39.2	--	--	--	--	--	--	--	--	--	
2307	0066	3	1	BOS	PH3	ND	1	5	?	?	E 85.0	--	--	27.0	--	--	--	--	--	--	--	--	
1942	0003	3	1	BOS	PH3	ND	1	5	?	8	86.9	--	--	39.5	--	--	--	--	--	--	--	--	
0878	0003	3	1	BOS	PH3	ND	1	4	?	?	66.0	56.0	35.3	21.0	--	--	--	--	--	--	--	--	
0362	0002	3	6	BOS	TTHUP	ND	1	L	?	?	26.1	19.6	30.0	--	--	--	--	--	--	--	--	--	
0311	0009	3	6	BOS	TTHUP	ND	1	L	?	J	--	--	--	--	--	--	30.5	E 17.5	50.5	--	--	--	
0770	0003	3	6	BOS	TTHUP	ND	1	L	?	A	E 30.0	E 24.0	13.5	--	--	--	--	--	--	--	--	--	
0799	0002	3	6	BOS	TTHUP	ND	1	R	?	A	--	--	--	--	--	--	E 33.5	23.0	32.5	--	--	--	
0699	0010	3	6	BOS	TTHUP	ND	1	R	?	A	23.8	--	--	--	--	--	--	--	--	--	--	--	
0699	0009	3	6	BOS	TTHUP	ND	1	R	?	A	--	--	--	35.3	26.2	25.0	--	--	--	--	--	--	
0745	0048	3	1	BOS	TTHUP	ND	1	R	?	6	--	--	--	--	--	--	37.6	21.9	53.2	--	--	--	
0812	0001	3	6	BOS	TTHUP	ND	1	R	?	8	--	--	--	29.6	21.0	39.0	--	--	--	--	--	--	
0849	0014	3	6	BOS	TTHUP	ND	1	R	?	A	--	--	--	28.8	27.9	16.5	--	--	--	--	--	--	
0853	0004	3	6	BOS	TTHUP	ND	1	L	?	8	--	--	--	--	--	--	32.7	20.3	46.8	--	--	--	
1915	0130	3	6	BOS	TTHUP	ND	1	R	?	6	30.0	--	34.0	--	--	--	--	--	--	--	--	--	
1915	0131	3	6	BOS	TTHUP	ND	1	L	?	A	--	--	--	29.9	E 24.5	20.5	--	--	--	--	--	--	
0159	0165	3	6	BOS	TTHUP	ND	1	R	?	J	--	--	--	--	--	--	34.8	19.5	--	--	--	--	
0779	0006	3	6	BOS	TTHUP	ND	1	L	?	J	--	--	--	--	--	--	33.5	18.9	53.0	--	--	--	
0854	0012	3	6	BOS	TTHUP	ND	1	R	?	6	27.1	--	26.0	--	--	--	--	--	--	--	--	--	
1930	0012	3	6	BOS	TTHUP	ND	1	R	?	A	--	--	--	32.5	--	20.0	--	--	--	--	--	--	
1930	0011	3	6	BOS	TTHUP	ND	1	R	?	J	--	--	--	--	--	--	32.5	20.0	50.0	--	--	--	
1933	0028	3	6	BOS	TTHUP	ND	1	L	?	S	--	--	--	--	--	--	32.0	20.0	43.5	--	--	--	
1934	0010	3	1	BOS	TTHUP	ND	1	L	?	6	30.2	20.9	32.0	--	--	--	--	--	--	--	--	--	
1934	0009	3	6	BOS	TTHUP	ND	1	L	?	J	--	--	--	--	--	--	31.5	18.5	46.0	--	--	--	
1934	0011	3	6	BOS	TTHUP	ND	1	R	?	6	30.2	20.0	36.0	--	--	--	--	--	--	--	--	--	
1934	0011	3	1	BOS	TTHUP	ND	1	R	?	6	30.2	20.0	36.0	--	--	--	--	--	--	--	--	--	
1934	0010	3	6	BOS	TTHUP	ND	1	L	?	6	30.2	20.9	32.0	--	--	--	--	--	--	--	--	--	
0161	0091	3	6	BOS	TTHUP	ND	1	L	?	6	--	--	--	33.0	E 20.0	50.5	--	--	--	--	--	--	
0173	0002	3	6	BOS	TTHUP	ND	1	R	?	J	--	--	--	--	--	--	30.5	18.2	--	--	--	--	
0188	0005	3	6	BOS	TTHUP	ND	1	R	?	6	27.8	19.1	34.3	--	--	--	--	--	--	--	--	--	
0188	0006	3	6	BOS	TTHUP	ND	1	L	?	6	--	--	--	35.1	19.8	48.2	--	--	--	--	--	--	
0737	0005	3	1	BOS	TTHUP	ND	1	L	?	J	--	--	--	34.0	E 24.0	50.0	--	--	--	--	--	--	
1376	0001	3	6	BOS	TTHUP	ND	1	L	?	J	--	--	--	34.6	21.0	54.0	--	--	--	--	--	--	
0196	0016	3	6	BOS	TTHUP	ND	1	L	?	6	--	--	--	31.5	18.0	34.0	--	--	--	--	--	--	
0205	0002	3	6	BOS	TTHUP	ND	1	L	?	J	--	--	--	31.2	--	--	--	--	--	--	--	--	
2104	0003	3	6	BOS	TTHUP	ND	1	L	?	6	--	--	--	--	--	--	31.2	17.2	46.7	--	--	--	
2112	0054	3	6	BOS	TTHUP	ND	1	R	?	J	--	--	--	--	--	--	32.3	18.0	--	--	--	--	
1941	0025	3	6	BOS	TTHUP	ND	1	R	?	4	30.4	18.0	38.7	--	--	--	--	--	--	--	--	--	
0893	0006	3	6	BOS	TTHUP	ND	1	L	?	Y	33.5	18.3	40.0	--	--	--	--	--	--	--	--	--	
2123	0006	3	6	BOS	TTHUP	ND	1	R	?	Y	--	16.0	40.0	--	--	--	--	--	--	--	--	--	
0827	0009	3	6	BOS	TTHUP	ND	1	R	?	J	30.3	E 13.0	E 35.0	--	--	--	--	--	--	--	--	--	
0833	0007	3	6	BOS	TTHUP	ND	1	L	?	J	--	--	--	--	--	--	31.5	E 18.5	E 55.0	--	--	--	
0833	0006	3	6	BOS	TTHUP	ND	1	R	?	8	--	--	--	28.2	E 21.5	25.0	--	--	--	--	--	--	
0716	0001	3	6	BOS	TTHLW	ND	1	R	?	J	--	--	--	--	--	--	39.4	12.1	--	--	--	--	
1329	0017	3	6	BOS	TTHLW	ND	1	L	?	A	--	--	--	30.9	[illegible]	37.5	--	--	--	--	--	--	
0856	0003	3	6	BOS	TTHLW	ND	1	L	?	8	--	--	--	26.3	17.7	19.3	--	--	--	--	--	--	
1915	0132	3	6	BOS	TTHLW	ND	1	R	?	?	29.8	12.6	34.0	--	--	--	--	--	--	--	--	--	
0747	0016	3	6	BOS	TTHLW	ND	1	L	?	S	--	--	--	--	--	--	E 37.5	13.6	45.0	--	--	--	
0167	0009	3	6	BOS	TTHLW	ND	1	R	?	8	--	--	--	30.4	17.9	23.5	--	--	--	--	--	--	
1914	0014	3	6	BOS	TTHLW	ND	1	L	?	8	--	--	--	--	--	--	E 40.0	13.7	51.0	--	--	--	
0159	0167	3	6	BOS	TTHLW	ND	1	L	?	A	23.5	16.7	11.5	--	--	--	--	--	--	--	--	--	
1930	0014	3	6	BOS	TTHLW	ND	1	L	?	A	--	--	--	28.0	15.5	30.0	--	--	--	--	--	--	
1932	0066	3	6	BOS	TTHLW	ND	1	L	?	4	31.0	12.8	42.5	--	--	--	--	--	--	--	--	--	
0175	0007	3	6	BOS	TTHLW	ND	1	R	?	A	--	--	--	--	--	--	E 40.0	14.4	44.0	--	--	--	
0175	0006	3	6	BOS	TTHLW	ND	1	R	?	8	--	--	--	33.0	13.5	50.8	--	--	--	--	--	--	
1935	0020	3	6	BOS	TTHLW	ND	1	L	?	S	28.0	15.5	24.5	--	--	--	--	--	--	--	--	--	
0207	0016	3	6	BOS	TTHLW	ND	1	L	?	4	32.6	11.0	49.6	--	--	--	--	--	--	--	--	--	
0886	0003	3	6	BOS	TTHLW	ND	1	R	?	6	--	--	--	--	--	--	41.3	13.3	56.0	--	--	--	

8 2

KEY IDENTIFICATION CHARAC. MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

KEY LOC	BON	F	M	ANM	ELM	DOM	C	S	SX	A	B	C	M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
2112	0053	3	6	BOS	TTHLW	ND	1	L	?	8			--	--	--	34.0	15.4	51.5	--	--	--	--	--	--	
2115	0027	3	6	BOS	TTHLW	ND	1	L	?	A			26.4	15.0	16.4	--	--	--	--	--	--	--	--	--	
2115	0026	3	6	BOS	TTHLW	ND	1	L	?	A			--	--	--	--	--	--	40.7	--	--	--	--	--	
0829	0002	3	6	BOS	TTHLW	ND	1	L	?	4			--	--	--	34.8	13.5	E 47.5	--	--	--	--	--	--	
0829	0001	3	6	BOS	TTHLW	ND	1	R	?	6			--	--	--	--	--	--	E 38.0	13.0	F 52.5	--	--	--	
2123	0007	3	6	BOS	TTHLW	ND	1	R	?	6			--	--	--	--	--	--	41.3	13.7	C 35.0	--	--	--	
2128	0031	3	6	BOS	TTHLW	ND	1	R	?	A			--	--	--	--	--	--	40.0	16.3	23.5	--	--	--	

RICHARD H MEADOW, PEABODY MUSEUM, HARVARD UNIV, MEASUREMENT REPORT FOR FAUNA FROM DAULATABAD R37 10/01/86 PAGE 1

KEY — IDENTIFICATION — CHARAC. — MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

LOC	BON	F	M	ANM	ELM	DOM	C	S	SX	A	B	C M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
3504	0041	3	6	O/C/G	TTHLW	ND	1	R	?	4		14.8	6.4	E 25.7	--	--	--	--	--	--	--	--	--	
3563	0142	3	6	OV/CP	MAX/T	ND	1	R	?	8		13.6	--	16.7	14.7	--	18.5	--	--	--	--	--	--	
3548	0005	3	6	OV/CP	MAX/T	ND	1	R	?	J		--	--	--	18.3	11.2	36.0	E 17.5	8.4	--	--	--	--	
3550	0035	3	6	OV/CP	MAX/T	ND	1	R	?	4		17.6	10.9	26.0	--	--	--	--	--	--	--	--	--	
3550	0042	3	6	OV/CP	MAX/T	ND	1	L	?	4		16.5	10.7	28.0	18.5	10.6	--	--	--	--	--	--	--	
3543	0006	3	6	OV/CP	MAX/T	ND	1	L	?	A		--	--	--	14.0	12.0	10.5	20.5	12.0	17.3	--	--	--	
3515	0033	3	6	OV/CP	MAN/T	ND	1	L	?	I		15.2	6.9	E 29.0	--	--	--	--	--	--	--	--	--	
3515	0033	3	5	OV/CP	MAN/T	ND	1	L	?	I		--	--	29.2	--	--	20.1	--	--	--	--	--	--	
3558	0001	3	6	OV/CP	MAN/T	ND	1	R	?	4		15.4	7.6	24.0	18.5	7.0	E 30.0	--	--	--	--	--	--	
3558	0001	3	5	OV/CP	MAN/T	ND	1	R	?	4		--	--	--	--	--	E 20.5	--	--	--	--	--	--	
3560	0002	3	6	OV/CP	MAN/T	ND	1	L	?	S		12.5	7.3	20.6	--	--	--	--	--	--	--	--	--	
3560	0001	3	6	OV/CP	MAN/T	ND	1	L	?	J		14.8	7.7	21.5	17.9	8.0	37.0	--	--	--	--	--	--	
3560	0004	3	6	OV/CP	MAN/T	ND	1	R	?	6		12.7	7.1	18.0	17.0	7.1	31.3	--	--	--	--	--	--	
3560	0003	3	6	OV/CP	MAN/T	ND	1	L	?	8		13.0	7.9	15.0	--	--	--	--	--	--	--	--	--	
3561	0045	3	6	OV/CP	MAN/T	ND	1	R	?	4		15.3	7.4	24.5	--	--	--	--	--	--	--	--	--	
3561	0045	3	5	OV/CP	MAN/T	ND	1	R	?	4		--	--	31.8	--	--	--	--	--	--	--	--	--	
3504	0034	3	6	OV/CP	MAN/T	ND	1	L	?	S		--	--	--	--	--	--	21.7	8.3	E 39.0	5.0	--	--	
3509	0002	3	6	OV/CP	MAN/T	ND	1	R	?	I		16.5	7.0	--	--	--	--	--	--	--	--	--	--	
3509	0002	3	5	OV/CP	MAN/T	ND	1	R	?	I		--	--	32.5	--	--	25.2	--	--	--	--	--	--	
3563	0118	3	6	OV/CP	MAN/T	ND	1	R	?	J		12.2	7.5	16.9	--	--	--	--	--	--	--	--	--	
3501	0001	3	6	OV/CP	MAN/T	ND	1	L	?	J		14.4	7.5	21.9	17.2	7.2	--	--	--	--	--	--	--	
3542	0027	3	5	OV/CP	MAN/T	ND	1	L	?	S		--	--	26.0	--	--	--	--	--	--	--	--	--	
3548	0001	3	6	OV/CP	MAN/T	ND	1	L	?	4		14.7	6.8	25.0	--	--	--	--	--	--	--	--	--	
3548	0001	3	5	OV/CP	MAN/T	ND	1	L	?	4		--	--	29.0	--	--	21.2	--	--	--	--	--	--	
3548	0002	3	6	OV/CP	MAN/T	ND	1	R	?	8		12.5	8.0	15.0	--	--	--	--	--	--	--	--	--	
3548	0002	3	5	OV/CP	MAN/T	ND	1	R	?	8		--	--	23.5	--	--	--	--	--	--	--	--	--	
3552	0004	3	6	OV/CP	MAN/T	ND	1	L	?	S		13.1	8.0	19.3	15.4	7.5	30.3	22.6	6.5	E 38.5	4.2	--	--	
3550	0033	3	6	OV/CP	MAN/T	ND	1	R	?	J		--	--	28.5	--	--	19.5	--	--	--	--	--	--	
3550	0073	3	6	OV/CP	MAN/T	ND	1	R	?	4		16.7	7.7	25.2	--	--	--	--	--	--	--	--	--	
3571	0002	3	5	OV/CP	MAN/T	ND	1	R	?	I		17.0	6.7	--	--	--	--	--	--	--	--	--	--	
3571	0002	3	5	OV/CP	MAN/T	ND	1	R	?	I		--	--	34.3	--	--	--	--	--	--	--	--	--	
3564	0001	3	6	OV/CP	MAN/T	ND	1	R	?	4		14.5	7.4	21.3	18.1	7.0	21.2	--	--	--	--	--	--	
3564	0001	3	5	OV/CP	MAN/T	ND	1	R	?	4		--	--	29.7	--	--	--	--	--	--	--	--	--	
3564	0002	3	6	OV/CP	MAN/T	ND	1	L	?	J		17.0	7.8	24.8	--	--	--	--	--	--	--	--	--	
3512	0005	3	6	OV/CP	MAN/T	ND	1	L	?	6		13.9	8.3	22.7	--	--	--	--	--	--	--	--	--	
3528	0012	3	5	OV/CP	MAN/T	ND	1	L	?	4		--	--	29.5	--	--	--	--	--	--	--	--	--	
3546	0008	3	1	OV/CP	ATLAS	ND	1	M	?	8		--	48.5	--	--	--	--	--	--	--	--	--	--	
3539	0001	3	1	OV/CP	AXIS	ND	1	M	?	A		E 58.5	49.5	--	E 20.0	--	--	--	--	--	--	--	--	
3560	0035	3	1	OV/CP	SCAP	ND	1	L	?	?		20.2	--	--	--	E 24.5	--	--	--	--	--	--	--	
3561	0026	3	1	OV/CP	MC3+4	ND	1	R	?	?		21.9	15.3	--	--	--	--	--	--	--	--	--	--	
3563	0087	3	1	OV/CP	MC3+4	ND	1	R	?	8		22.2	15.8	--	--	--	--	--	--	--	--	--	--	
3564	0006	3	1	OV/CP	MC3+4	ND	1	L	?	4		22.7	16.0	15.5	--	--	--	--	--	--	--	--	--	
3566	0003	3	1	OV/CP	MC3+4	ND	1	L	?	Y		20.9	13.5	--	--	--	--	--	--	--	--	--	--	
3563	0019	3	1	OV/CP	FEMUR	ND	1	R	?	A		--	--	--	E 31.3	16.0	--	--	--	--	--	--	--	
3550	0014	3	1	OV/CP	FEMUR	ND	1	R	?	A		--	--	--	33.3	15.0	--	--	--	--	--	--	--	
3573	0022	3	1	OV/CP	FEMUR	ND	1	L	?	8		--	18.8	--	--	--	--	--	--	--	--	--	--	
3554	0001	3	1	OV/CP	MT3+4	ND	1	L	?	I		--	17.0	16.4	9.6	--	--	--	--	--	--	--	--	
3518	0004	3	6	OV/CP	TTHUP	ND	1	L	?	J		17.7	10.7	--	--	--	--	--	--	--	--	--	--	
3558	0006	3	6	OV/CP	TTHUP	ND	1	L	?	4		16.5	9.4	--	--	--	--	--	--	--	--	--	--	
3558	0008	3	6	OV/CP	TTHUP	ND	1	L	?	A		--	--	--	12.9	13.0	11.5	--	--	--	--	--	--	
3558	0007	3	6	OV/CP	TTHUP	ND	1	R	?	S		--	--	--	--	--	--	E 18.5	11.0	--	--	--	--	
3560	0008	3	6	OV/CP	TTHUP	ND	1	R	?	4		--	--	--	E 17.5	E 9.9	34.5	--	--	--	--	--	--	
3560	0007	3	6	OV/CP	TTHUP	ND	1	R	?	S		--	--	--	17.5	12.3	28.0	--	--	--	--	--	--	
3560	0011	3	6	OV/CP	TTHUP	ND	1	R	?	J		15.5	10.5	27.0	--	--	--	--	--	--	--	--	--	
3560	0010	3	6	OV/CP	TTHUP	ND	1	R	?	8		--	--	--	17.9	12.0	25.8	--	--	--	--	--	--	
3560	0009	3	6	OV/CP	TTHUP	ND	1	R	?	A		--	--	--	--	--	--	21.0	13.0	23.5	--	--	--	
3556	0007	3	6	OV/CP	TTHUP	ND	1	L	?	A		10.0	10.5	10.8	--	--	--	--	--	--	--	--	--	
3556	0005	3	6	OV/CP	TTHUP	ND	1	R	?	I		17.5	10.2	29.2	--	--	--	--	--	--	--	--	--	
3556	0004	3	6	OV/CP	TTHUP	ND	1	R	?	S		--	--	--	17.3	--	--	--	--	--	--	--	--	
3561	0060	3	6	OV/CP	TTHUP	ND	1	L	?	J		15.9	10.5	26.0	--	--	--	--	--	--	--	--	--	
3561	0059	3	6	OV/CP	TTHUP	ND	1	L	?	4		--	--	--	16.7	10.6	--	--	--	--	--	--	--	
3504	0035	3	6	OV/CP	TTHUP	ND	1	R	?	8		--	--	--	--	--	--	20.1	11.5	33.0	--	--	--	
3504	0036	3	6	OV/CP	TTHUP	ND	1	L	?	6		--	--	--	16.5	11.5	26.8	--	--	--	--	--	--	
3509	0013	3	6	OV/CP	TTHUP	ND	1	R	?	6		--	--	--	15.6	11.4	E 27.0	--	--	--	--	--	--	
3557	0030	3	6	OV/CP	TTHUP	ND	1	R	?	A		--	--	--	--	--	--	18.0	12.0	27.7	--	--	--	
3563	0131	3	6	OV/CP	TTHUP	ND	1	R	?	S		--	--	--	15.9	12.0	32.7	--	--	--	--	--	--	
3563	0129	3	6	OV/CP	TTHUP	ND	1	L	?	S		--	--	--	15.9	11.6	30.8	--	--	--	--	--	--	
3563	0134	3	6	OV/CP	TTHUP	ND	1	L	?	A		13.7	--	16.6	--	--	--	--	--	--	--	--	--	
3563	0132	3	6	OV/CP	TTHUP	ND	1	R	?	6		16.7	--	27.0	--	--	--	--	--	--	--	--	--	
3539	0017	3	6	OV/CP	TTHUP	ND	1	R	?	6		14.3	11.0	19.5	--	--	--	--	--	--	--	--	--	
3539	0018	3	6	OV/CP	TTHUP	ND	1	R	?	A		--	--	--	13.9	12.8	16.0	--	--	--	--	--	--	
3546	0010	3	6	OV/CP	TTHUP	ND	1	R	?	I		--	--	--	17.4	10.5	--	--	--	--	--	--	--	
3549	0007	3	6	OV/CP	TTHUP	ND	1	L	?	S		--	--	--	17.5	11.8	29.3	--	--	--	--	--	--	
3512	0009	3	6	OV/CP	TTHUP	ND	1	R	?	8		--	--	--	17.5	13.9	27.8	--	--	--	--	--	--	
3528	0024	3	6	OV/CP	TTHUP	ND	1	R	?	4		17.4	10.5	-- •	--	--	--	--	--	--	--	--	--	
3515	0036	3	6	OV/CP	TTHLW	ND	1	L	?	J		15.5	7.3	--	--	--	--	--	--	--	--	--	--	
3515	0035	3	6	OV/CP	TTHLW	ND	1	L	?	6		--	--	--	--	--	--	24.4	8.2	37.2	5.4	--	--	
3553	0001	3	6	OV/CP	TTHLW	ND	1	L	?	S		--	--	--	--	--	--	22.9	8.0	35.2	4.7	--	--	
3511	0001	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	15.0	107.6	25.0	--	--	--	--	--	--	
3511	0003	3	6	OV/CP	TTHLW	ND	1	L	?	A		9.8	8.0	10.5	--	--	--	--	--	--	--	--	--	
3511	0002	3	6	OV/CP	TTHLW	ND	1	R	?	6		--	--	--	--	--	--	22.3	8.0	E 32.5	3.6	--	--	
3554	0002	3	6	OV/CP	TTHLW	ND	1	L	?	A		--	--	--	--	--	--	24.0	8.5	21.5	5.8	--	--	
3504	0042	3	6	OV/CP	TTHLW	ND	1	L	?	4		15.1	7.1	23.7	--	--	--	--	--	--	--	--	--	
3504	0040	3	6	OV/CP	TTHLW	ND	1	R	?	8		--	--	--	--	--	--	21.7	8.1	25.0	4.6	--	--	
3504	0043	3	6	OV/CP	TTHLW	ND	1	L	?	S		--	--	--	14.6	108.3	24.0	--	--	--	--	--	--	
3563	0138	3	6	OV/CP	TTHLW	ND	1	L	?	A		--	--	--	E 14.5	8.9	18.5	--	--	--	--	--	--	
3563	0135	3	6	OV/CP	TTHLW	ND	1	R	?	A		14.0	8.7	9.5	--	--	--	--	--	--	--	--	--	
3563	0146	3	6	OV/CP	TTHLW	ND	1	L	?	8		--	--	--	15.0	8.4	28.0	--	--	--	--	--	--	
3567	0004	3	6	OV/CP	TTHLW	ND	1	L	?	J		14.8	7.9	22.5	--	--	--	--	--	--	--	--	--	
3567	0003	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	15.9	7.5	24.5	--	--	--	--	--	--	
3501	0005	3	6	OV/CP	TTHLW	ND	1	R	?	A		--	--	--	--	--	--	22.8	8.2	19.0	5.3	--	--	
3542	0028	3	6	OV/CP	TTHLW	ND	1	R	?	6		13.7	8.0	21.7	--	--	--	--	--	--	--	--	--	
3549	0006	3	6	OV/CP	TTHLW	ND	1	R	?	J		--	--	--	18.0	7.5	E 30.0	--	--	--	--	--	--	
3538	0002	3	6	OV/CP	TTHLW	ND	1	R	?	J		--	--	--	17.2	7.6	28.2	--	--	--	--	--	--	
3564	0008	3	6	OV/CP	TTHLW	ND	1	L	?	8		--	--	--	18.0	9.0	--	--	--	--	--	--	--	
3535	0003	3	6	OV/CP	TTHLW	ND	1	R	?	6		14.0	8.3	22.2	--	--	--	--	--	--	--	--	--	
3519	0004	3	6	OV/CP	TTHLW	ND	1	L	?	J		E 14.0	7.1	--	--	--	--	--	--	--	--	--	--	
3528	0019	3	6	OV/CP	TTHLW	ND	1	R	?	A		9.8	7.5	8.0	--	--	--	--	--	--	--	--	--	
3528	0022	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	--	--	--	22.7	7.3	E 35.0	4.3	--	--	
3528	0021	3	6	OV/CP	TTHLW	ND	1	L	?	J		--	--	--	18.6	8.2	33.4	--	--	--	--	--	--	

KEY IDENTIFICATION CHARAC. MEASUREMENTS (MILLIMETERS UNLESS AN "F" UNDER COLUMN "C")

LOC	BON	F	H	ANM	ELM	DOM	C	S	SX	A	B	C M1	C M2	C M3	C M4	C M5	C M6	C M7	C M8	C M9	C M10	C M11	C M12	COMMENT
3528	0020	3	6	OV/CP	TTHLW	ND	1	L	?	6		--	--	--	--	8.1	17.8	--	--	--	--	--	--	
3559	0018	3	1	OVIS	SCAP	ND	1	R	?	8		22.0	--	--	--	--	--	--	--	--	--	--	--	
3507	0011	3	1	OVIS	SCAP	ND	3	L	?	8		21.0	--	--	--	--	--	--	--	--	--	--	--	
3507	0001	3	1	OVIS	SCAP	ND	1	R	?	8	7	20.3	32.4	25.5	22.2	21.6	--	--	--	--	--	--	--	
3560	0039	3	1	OVIS	SCAP	ND	4	R	?	8		20.7	36.4	28.0	22.2	23.0	--	--	--	--	--	--	--	
3556	0019	3	1	OVIS	SCAP	ND	1	R	?	8		19.2	E 31.5	E 25.0	--	20.6	--	--	--	--	--	--	--	
3561	0036	3	1	OVIS	SCAP	ND	1	L	?	8		19.5	34.3	27.2	--	21.0	--	--	--	--	--	--	--	
3562	0001	3	1	OVIS	SCAP	ND	1	R	?	8		20.2	E 32.0	E 25.0	--	21.5	--	--	--	--	--	--	--	
3563	0058	3	1	OVIS	SCAP	ND	1	L	?	8		20.2	34.5	27.3	22.5	18.0	--	--	--	--	--	--	--	
3563	0065	3	1	OVIS	SCAP	ND	1	L	?	8		19.5	--	--	--	E 20.8	--	--	--	--	--	--	--	
3563	0062	3	1	OVIS	SCAP	ND	1	L	?	8		--	31.9	26.7	22.0	--	--	--	--	--	--	--	--	
3550	0021	3	1	OVIS	SCAP	ND	4	L	?	8		18.2	--	--	--	--	--	--	--	--	--	--	--	
3569	0021	3	1	OVIS	SCAP	ND	1	?	?	8		21.3	36.3	27.7	23.6	25.0	--	--	--	--	--	--	--	
3525	0023	3	1	OVIS	SCAP	ND	3	R	?	8		22.4	--	E 25.1	23.9	26.8	--	--	--	--	--	--	--	
3568	0002	3	1	OVIS	RAD	ND	4	R	?	J		E 23.8	23.1	--	--	--	--	--	--	--	--	--	--	
3573	0018	3	1	OVIS	RAD	ND	1	L	?	S		--	--	--	E 34.2	27.5	--	--	--	--	--	--	--	
3563	0029	3	1	OVIS	IL/IS	ND	1	R	F	8		28.0	--	--	--	--	--	--	--	--	--	--	--	
3558	0020	3	1	OVIS	TIBIA	ND	1	L	?	8		--	--	24.8	19.4	--	--	--	--	--	--	--	--	
3561	0020	3	1	OVIS	TIBIA	ND	1	[illegible]	?	8		--	--	24.2	18.9	--	--	--	--	--	--	--	--	
3542	0009	3	1	OVIS	TIBIA	ND	1	R	?	8		--	--	26.3	19.6	--	--	--	--	--	--	--	--	
3562	0012	3	1	OVIS	TALUS	ND	1	R	?	8		26.6	--	--	--	--	--	--	--	--	--	--	--	
3573	0008	3	1	OVIS	TALUS	ND	1	R	?	Y		--	25.7	--	--	--	--	--	--	--	--	--	--	
3515	0003	3	1	CAPRA	SCAP	ND	4	L	?	6		18.6	--	--	21.6	22.5	--	--	--	--	--	--	--	
3559	0016	3	1	CAPRA	SCAP	ND	3	L	?	?		19.1	--	--	--	--	--	--	--	--	--	--	--	
3561	0037	3	1	CAPRA	SCAP	ND	4	R	?	J		17.5	E 33.0	E 27.5	--	22.5	--	--	--	--	--	--	--	
3561	0039	3	1	CAPRA	SCAP	ND	1	L	?	8		21.5	35.7	27.8	23.5	26.0	146.0	--	--	--	--	--	--	
3561	0038	3	1	CAPRA	SCAP	ND	4	R	?	6		14.3	--	22.5	18.0	20.0	--	--	--	--	--	--	--	
3563	0059	3	1	CAPRA	SCAP	ND	1	R	?	?		17.4	--	--	--	E 22.3	--	--	--	--	--	--	--	
3539	0009	3	1	CAPRA	SCAP	ND	4	L	?	?		18.0	E 28.0	23.5	19.1	21.5	--	--	--	--	--	--	--	
3542	0001	3	1	CAPRA	SCAP	ND	1	R	?	8		19.3	30.9	24.9	19.8	24.0	--	--	--	--	--	--	--	
3550	0023	3	1	CAPRA	SCAP	ND	1	L	?	8		21.9	--	E 27.0	24.5	27.8	--	--	--	--	--	--	--	
3550	0022	3	1	CAPRA	SCAP	ND	1	R	?	8		19.5	28.9	23.8	20.3	24.0	--	--	--	--	--	--	--	
3506	0001	3	1	CAPRA	SCAP	ND	4	R	?	8		--	--	--	20.0	23.6	--	--	--	--	--	--	--	
3535	0001	3	1	CAPRA	SCAP	ND	4	R	?	?		18.0	--	--	--	--	--	--	--	--	--	--	--	
3559	0039	3	1	CAPRA	HUMER	ND	1	R	?	8		33.1	32.0	--	--	--	--	--	--	--	--	--	--	
3504	0008	3	1	CAPRA	HUMER	ND	4	R	?	8	6	28.6	27.3	--	--	--	--	--	--	--	--	--	--	
3550	0020	3	1	CAPRA	HUMER	ND	1	R	?	6		26.5	25.7	--	--	--	--	--	--	--	--	--	--	
3515	0032	3	1	CAPRA	RAD	ND	1	R	?	4		28.5	27.3	--	--	--	--	--	--	--	--	--	--	
3560	0015	3	1	CAPRA	RAD	ND	1	R	?	8		28.2	27.5	16.5	--	--	--	--	--	--	--	--	--	
3557	0017	3	1	CAPRA	RAD	ND	1	R	?	A	8	--	--	--	28.6	24.2	--	--	--	--	--	--	--	
3539	0012	3	1	CAPRA	RAD	ND	1	L	?	A		--	--	--	26.6	25.0	--	--	--	--	--	--	--	
3528	0034	3	1	CAPRA	RAD	ND	1	R	?	6		26.0	25.3	--	--	--	--	--	--	--	--	--	--	
3561	0018	3	1	CAPRA	TIBIA	ND	1	L	?	8		--	13.0	22.9	18.2	--	--	--	--	--	--	--	--	
3511	0037	3	1	CAPRA	TALUS	ND	1	R	?	8		E 25.8	24.7	13.7	--	16.7	15.5	--	--	--	--	--	--	
3558	0027	3	1	CAPRA	TALUS	ND	1	R	?	8		27.0	25.2	13.8	--	17.3	15.8	--	--	--	--	--	--	
3558	0028	3	1	CAPRA	TALUS	ND	1	R	?	Y		28.4	26.8	14.5	--	17.7	16.3	--	--	--	--	--	--	
3559	0032	3	1	CAPRA	TALUS	ND	1	L	?	8		27.4	26.7	14.5	--	18.0	17.0	--	--	--	--	--	--	
3504	0011	3	1	CAPRA	TALUS	ND	1	L	?	8		25.7	24.0	14.1	--	17.5	16.1	--	--	--	--	--	--	
3549	0004	3	1	CAPRA	TALUS	ND	1	L	?	8		27.3	--	14.2	--	--	--	--	--	--	--	--	--	
3564	0019	3	1	CAPRA	TALUS	ND	1	L	?	8		25.8	24.5	14.1	--	16.7	15.9	--	--	--	--	--	--	
3566	0018	3	1	CAPRA	TALUS	ND	1	R	?	8		--	25.0	--	--	--	--	--	--	--	--	--	--	
3543	0005	3	1	CAPRA	TALUS	ND	1	L	?	8		25.6	24.2	14.0	--	16.1	15.8	--	--	--	--	--	--	
3519	0022	3	1	CAPRA	TALUS	ND	2	R	?	8		27.0	25.0	14.0	--	16.2	15.3	--	--	--	--	--	--	
3558	0029	3	1	CAPRA	PH1	ND	3	4	?	8		--	--	11.2	--	--	--	--	--	--	--	--	--	
3551	0002	3	1	CAPRA	PH1	ND	1	4	?	8		34.3	11.7	12.2	10.8	--	--	--	--	--	--	--	--	
3551	0001	3	1	CAPRA	PH1	ND	1	5	?	8		35.2	12.2	11.8	10.0	--	--	--	--	--	--	--	--	
3573	0001	3	5	GAZEL	MAN/T	W	4	L	?	J		--	--	24.5	--	--	15.3	--	--	--	--	--	--	
3573	0001	3	6	GAZEL	MAN/T	W	4	L	?	J		12.7	5.1	E 20.0	--	--	--	--	--	--	--	--	--	
3560	0038	3	1	GAZEL	SCAP	W	1	R	?	8		14.9	E 26.0	24.0	18.4	15.2	--	--	--	--	--	--	--	
3550	0024	3	1	GAZEL	SCAP	W	1	R	?	8		15.4	E 29.6	25.0	20.7	14.2	--	--	--	--	--	--	--	
3548	0007	3	1	GAZEL	CALC	W	1	R	?	6	7	--	16.2	22.2	--	50.6	18.1	--	--	--	--	--	--	
3562	0009	3	1	GAZEL	PH3	W	1	5	?	?	4	25.6	21.0	13.2	--	--	--	--	--	--	--	--	--	
3550	0038	3	6	BOS	MAN/T	ND	1	R	?	J		25.7	13.8	27.0	31.2	13.9	43.5	40.0	13.3	50.8	--	--	--	
3547	0008	3	1	BOS	AXIS	ND	1	M	?	6		--	--	89.3	43.9	--	29.8	--	--	--	--	--	--	
3562	0025	3	1	BOS	SCAP	ND	1	R	?	8		E 54.8	70.7	59.2	48.4	50.8	E 327.0	328.0	--	--	--	--	--	
3563	0108	3	1	BOS	HUMER	ND	1	R	?	J	8	E 91.2	E 83.2	--	--	--	--	--	--	--	--	--	--	
3560	0049	3	1	BOS	C-RAD	ND	1	L	?	Y		32.3	28.5	--	--	--	--	--	--	--	--	--	--	
3525	0006	3	1	BOS	C-RAD	ND	1	R	?	?		34.7	32.5	--	--	--	--	--	--	--	--	--	--	
3556	0014	3	1	BOS	MC3+4	ND	1	R	?	8	8	--	--	--	E 60.4	E 33.6	--	--	--	--	--	--	--	
3529	0002	3	1	BOS	MC3+4	ND	1	R	?M	8		--	--	--	68.2	E 37.0	--	--	--	--	--	--	--	
3504	0033	3	1	BOS	PH1AN	ND	1	M	?	J		58.0	24.5	25.6	22.0	--	--	--	--	--	--	--	--	
3566	0019	3	1	BOS	PH2AN	ND	1	L	?	8		40.8	30.0	25.6	23.9	--	--	--	--	--	--	--	--	
3552	0001	3	1	BOS	PH3AN	ND	1	4	?M	8		--	--	40.0	--	--	--	--	--	--	--	--	--	
3561	0002	3	1	BOS	TALUS	ND	1	R	?	Y		70.4	65.5	38.5	--	44.2	43.2	--	--	--	--	--	--	
3567	0001	3	1	BOS	CALC	ND	1	L	?	J		--	46.5	59.2	--	140.8	--	--	--	--	--	--	--	
3557	0001	3	6	BOS	TTHLW	ND	1	R	?	A		--	--	--	29.7	16.8	24.0	--	--	--	--	--	--	
3563	0098	3	6	BOS	TTHLW	ND	1	R	?	8		--	--	--	--	--	--	36.0	12.3	49.3	--	--	--	
3512	0001	3	6	BOS	TTHLW	ND	1	L	?	J		--	--	--	36.3	13.6	50.0	--	--	--	--	--	--	
3525	0001	3	6	BOS	TTHLW	ND	1	L	?	8		--	--	--	29.1	E 16.0	E 33.3	--	--	--	--	--	--	

APPENDIX 3-A

EXCAVATION UNITS SORTED BY LOCUS CODE

See Appendix 1 for explantation of abbreviations

LOC	SQR	YR	TT	STR	FEA	FLR/FL/FTR	IN/X	ICX	ECX	FILL	Q	REC	SAME	CTMN	EARL	LATE	PERIOD	--PERIOD	SITE	DATE	C	COMMENT
0157	-C	71	1	-1		MIXED FILL	ASSC			GEL	G	RPK	0157	----	----	----	7 D	-	SETL	5000BC	1	6-12,15,13
0158	-C	71	3	-1		ROOM FILL	ASSC			BRICK	G	PK	----	0161	0164	0737	7 A	-	DOMS	5000BC	1	RM.FILL 7-1
0159	-C	71	3	-2		UNDIF.FILL	NONE			SFT/BK	G	PK	----	0171	0188	0167	6 B	2-	SETL	4500BC	1	ASHY 12 7/3-10
0160	-C	71	1	-2		UNDIF.FILL				HARD	F	RPK	----	0833	----	----	7 E	-	SETL	5000BC	1	STERILE SOIL
0161	-C	71	2	-1		ROOM FILL	ASSC			BRICK	G	PK	0161	0158	0164	0737	7 A	-	DOMS	5000BC	3	FALL 6/27-7/1
0162	-C	71	3	-3	-1	FLR.+ABOVE	IN	RM3		SOFT	E	FPK	----	0164	----	0158	7 A	-	DOMS	5000BC	3	ROOM 8 7-7
0163	-C	71	3	-1	-5	FLR.+ABOVE	IN	RM1		BRICK	E	FPK	----	0164	----	0158	7 A	-	DOMS	5000BC	3	ROOM 5 7-6
0164	-C	71	3	-1	-4	FLR.+ABOVE	IN	RM3		BRICK	E	FPK	----	0163	----	0158	7 A	-	DOMS	5000BC	3	ROOM 4 7-6
0165	-C	71	3	-3	3-4	FLR.+ABOVE	ASSC			BRICK	E	FPK	----	0164	----	0158	7 A	-	DOMS	5000BC	1	MXD-OUD+IN7-13
0166	-C	71	3	-3	-1	FLR.+ABOVE	IN	RM3		SOFT	E	FPK	----	0164	----	0158	7 A	-	DOMS	5000BC	3	ROOM 8 7-13
0167	-C	71	4	-1		ON FLOOR	IN	RM1		SOFT	E	FPK	----	----	0171	----	6 B	1-	SETL	4500BC	1	7-14
0168	-C	71	3	-3	-4	FLR.+ABOVE	IN	RM3		BRICK	E	FPK	0168	0164	----	0158	7 A	-	DOMS	5000BC	3	ROOM 9 7-15
0169	-C	71	4	-2		UNDIF.FILL	NONE			BRICK	G	PK	----	0171	0174	0167	6 B	2-	SETL	4500BC	1	7-15
0170	-C	71	4	-3	-1	FLR.+ABOVE	IN	RM3		BRICK	E	FPK	0170	0164	----	0158	7 A	-	DOMS	5000BC	3	ROOM 10 7-15
0171	-C	71	4	-3		MIDDEN	NONE			ASHY'	G	PK	----	0159	0188	0167	6 B	2-	SETL	4500BC	1	ASH 12 7-17
0172	-C	71	4	-4	-1	FLR.+ABOVE	IN	RM3		BRICK	E	FPK	0168	0164	----	0158	7 A	-	DOMS	5000BC	1	ROOM 9 7-19
0173	-C	71	4	-4	-2	FLR.+ABOVE	IN	RM3		BRICK	E	FPK	0170	0164	----	0158	7 A	-	DOMS	5000BC	1	ROOM 10 7-19
0174	-C	71	4	3A		IN FLOORS	OUT		OP-N	LAMIN.	G	PK	----	0737	0161	0708	7 A	-	DOMS	5000BC	1	7-20
0175	-C	71	2	-1		ROOM FILL	ASSC			BRICK	G	PK	0161	0158	0164	0737	7 A	-	DOMS	5000BC	3	FALL IN 1 7-21
0178	-C	70	6	-3		MIXED FILL	ASSC			HARD	F	RPK	0763	0847	----	----	7 C	1- 7 C 2	SETL	5000BC	1	7-29
0179	-C	71	1	-1		MIXED FILL	ASSC			GEL	G	RPK	0157	----	----	----	7 D	-	SETL	5000BC	1	6-13
0180	-C	71	1	-1		MIXED FILL	ASSC			GEL	G	RPK	0157	----	----	----	7 D	-	SETL	5000BC	1	CU PIN 6-14
0182	-C	71	6	-1	-6A	FLR.+ABOVE	OUT		OP-F	SOFT	E	FPK	0182	----	----	0192	7 B	1-	DOMS	5000BC	1	8-5
0183	-C	71	7	-1		FLR.+ABOVE	OUT		OP-F	??	G	FPK	----	----	----	0211	7 B	1-	DOMS	5000BC	1	8-10
0184	-C	71	6	-1	-2	IM.AB.FLR.	OUT		ALLY	ASHY	E	FPK	0184	0187	----	----	7 B	2-	DOMS	5000BC	3	ALLEY 7 7-28
0185	-C	71	7	-2		MIDDEN	OUT		OP-N	ASHY	G	FPK	----	0855	----	0187	7 B	2-	DOMS	5000BC	1	8-15
0186	-C	71	6	-1	-2	IM.AB.FLR.	OUT		ALLY	ASHY	E	FPK	0184	0187	----	----	7 B	2-	DOMS	5000BC	3	ALLEY 7 7-28
0187	-C	71	6	-1	-1	IN FLOORS	IN	RM1		ASHY	E	FPK	0187	----	----	----	7 B	2-	DOMS	5000BC	3	ROOM 6 7-28
0188	-C	71	3	-3		ROOM FILL	ASSC			BRICK	G	PK	----	0158	0164	0737	7 A	-	DOMS	5000BC	1	7-22
0189	-C	71	6	-1	-3	IN FLOORS	IN	RM1		ASHY	E	FPK	0189	0187	----	----	7 B	2-	DOMS	5000BC	3	ROOM 3 7-28
0190	-C	71	6	-1	-3	IN FLOORS	IN	RM1		ASHY	E	FPK	0189	0187	----	----	7 B	2-	DOMS	5000BC	3	ROOM 3 7-27
0191	-C	71	6	-1	-4	IN FLOORS	IN	RM1		ASHY	E	FPK	0191	0187	----	----	7 B	2-	DOMS	5000BC	3	ROOM 2 7-29
0192	-C	71	6	1A		FLR.+ABOVE	OUT		OP-F	??	E	FPK	0192	0211	0182	--	7 B	1-	DOMS	5000BC	1	8-3
0193	-C	71	6	-1	-2	IM.AB.FLR.	OUT		ALLY	ASHY	E	FPK	0184	0187	----	----	7 B	2-	DOMS	5000BC	3	ALLEY 7 7-27
0194	-C	71	6	1A		FLR.+ABOVE	OUT		OP-F	??	E	FPK	0192	0211	0182	----	7 B	1-	DOMS	5000BC	1	7-28
0195	-C	71	6	-1	-5	ON FLOOR	IN	RM3		ASHY	E	FPK	----	0187	----	----	7 B	2-	DOMS	5000BC	3	RM.8 8-15
0196	-C	71	6	-1	-9	IM.AB.FLR.	IN	RM1		ASHY	E	FPK	----	0187	----	----	7 B	2-	DOMS	5000BC	3	ROOM 4 8-14
0197	-C	71	6	-1	-6A	FLR.+ABOVE	OUT		OP-F	SOFT	E	FPK	0182	----	----	0192	7 B	1-	DOMS	5000BC	1	8-4
0198	-C	71	6	-1	-7	IN FLOORS	IN	RM1		ASHY	E	FPK	----	0187	----	----	7 B	2-	DOMS	5000BC	3	ROOM 5 7-31
0199	-C	71	6	-1	-4	IN FLOORS	IN	RM1		ASHY	E	FPK	0191	0187	----	----	7 B	2-	DOMS	5000BC	3	RM.2 8-11,12
0200	-C	71	6	-1	-6	IN FLOORS	OUT		CORT	HARD	E	FPK	----	0187	----	----	7 B	2-	DOMS	5000BC	3	COURT 23 8-7
0201	-C	71	6	-1	-8	IN FLOORS	OUT		OP-N	HARD	E	FPK	0201	0187	----	----	7 B	2-	DOMS	5000BC	1	8-12
0202	-C	71	6	-1	-2	IM.AB.FLR.	OUT		ALLY	ASHY	E	FPK	0184	0187	----	----	7 B	2-	DOMS	5000BC	3	ALLEY 7 8-14
0203	-C	71	6	-1	-6	IN FLOORS	OUT		CORT	HARD	E	FPK	----	0187	----	----	7 B	2-	DOMS	5000BC	3	COURT 23 7-31
0204	-C	71	6	-1	-2	IM.AB.FLR.	OUT		ALLY	ASHY	E	FPK	0184	0187	----	----	7 B	2-	DOMS	5000BC	3	ALLEY 7 7-29
0205	-C	71	6	-1	-8	IN FLOORS	OUT		OP-N	HARD	E	FPK	0201	0187	----	----	7 B	2-	DOMS	5000BC	1	8-14
0206	-C	71	6	1A		FLR.+ABOVE	OUT		OP-F	??	E	FPK	0192	0211	0182	----	7 B	1-	DOMS	5000BC	1	8-2
0207	-C	71	6	1A		FLR.+ABOVE	OUT		OP-F	??	E	FPK	0192	0211	0182	----	7 B	1-	DOMS	5000BC	1	8-1
0208	-C	71	6	-1	-1	IN FLOORS	IN	RM1		ASHY	E	FPK	0187	----	----	----	7 B	2-	DOMS	5000BC	3	ROOM 6 7-27
0209	-C	71	4	-4	-2	FLR.+ABOVE	IN	RM3		BRICK	E	FPK	0168	0164	----	0158	7 A	-	DOMS	5000BC	1	ROOM 9 7-24
0210	-C	71	6	-1	-2	IM.AB.FLR.	OUT		ALLY	ASHY	E	FPK	0184	0187	----	----	7 B	2-	DOMS	5000BC	3	ALLEY 7 7-26
0211	-C	71	7	1A		FLR.+ABOVE	OUT		OP-F	??	E	FPK	0211	0192	0182	----	7 B	1-	DOMS	5000BC	1	8-7
0212	-C	71	7	1A		FLR.+ABOVE	OUT		OP-F	??	E	FPK	0211	0192	0182	----	7 B	1-	DOMS	5000BC	1	8-9
0213	-C	71	6	-1	-6	IN FLOORS	OUT		CORT	HARD	E	FPK	----	0187	----	----	7 B	2-	DOMS	5000BC	3	COURT 23 8-7
0214	-C	71	6	-1	-3	IN FLOORS	IN	RM1		ASHY	E	FPK	0189	0187	----	----	7 B	2-	DOMS	5000BC	3	ROOM 3 8-11
0215	-C	71	6	-1	-6A	FLR.+ABOVE	OUT		OP-F	SOFT	E	FPK	0182	----	----	0192	7 B	1-	DOMS	5000BC	1	8-3
0278	-B	71		-4	-9	FLR.+ABOVE	IN	??		HARD	E	PK	----	----	----	----	4 C	1-	MONU	3200BC	1	E.OF RM.4 6-23
0279	-B	71		-4	10	FLR.+ABOVE	IN	SPEC		??	E	PK	----	0302	0304	0282	4 C	1-	MONU	3200BC	1	R.3 ?STRG 6-24
0280	BM	71		4-5		ROOM FILL	IN	SPEC		SOFT	G	PK	----	0305	0330	----	4 C	1-	MONU	3200BC	1	R.6 WELL 6-22
0282	-B	71		-4	-6	PLATFORM	IN	SPEC		GEL	E	PK	----	0301	0279	----	4 C	1-	MONU	3200BC	1	R.4 ?STRG 6-19
0283	BM	71		-1	-1	ROOM FILL	IN	RM1		SFT/BK	G	PK	0283	----	0291	----	4 C	1- 4 B 6	MONU	3200BC	1	RM.1B 6-20
0286	-B	71		6-9		ROOM FILL	ASSC			??	F	PK	----	----	----	----	4 C	2- 4 C 1	MONU	3200BC	1	MIXED 6,8,9
0289	-B	70		20		FLR.+ABOVE	IN	RM3		??	G	PK	----	----	----	----	4 C	2-	MONU	3200BC	1	ROOM#5 6-17-71
0290	BM	71		-3	-5	HEARTH	IN	RM1		BURNED	E	PK	----	----	0307	0291	4 C	2-	MONU	3200BC	1	RM.1B 7-1
0291	BM	71		-2	-1	ROOM FILL	IN	RM1		BRICK	G	PK	----	0293	0290	0283	4 C	1- 4 B 6	MONU	3200BC	1	RM.1B 6-21
0293	BM	71		-5		ROOM FILL	IN	SPEC		SOFT	G	PK	----	0305	0330	----	4 C	1-	MONU	3200BC	1	RM.6 WELL 6-23
0294	-B	71		-5	-1	FLR.+ABOVE	IN	SPEC		??	E	PK	----	0304	----	0302	4 C	2-	MONU	3200BC	1	R.4 ?STRG 6-21
0295	-B	71		13		IM.AB.FLR.	IN	SPEC		SOFT	E	PK	----	----	0327	0305	4 C	2-	MONU	3200BC	1	RM.6 WELL 7-1
0296	-B	71	1	-1		ROOM FILL	IN	SPEC		SFT/BK	G	PK	----	0280	----	----	4 C	1-	MONU	3200BC	1	RM.6 WELL 6-16
0297	BM	71		-1	-1	ROOM FILL	IN	RM1		SFT/BK	G	PK	0283	----	0291	----	4 C	1- 4 B 6	MONU	3200BC	1	RM.1B 6-21
0301	-B	71	2	-2		PLATFORM	IN	SPEC		GEL	E	PK	----	0282	0302	----	4 C	1-	MONU	3200BC	1	R.4 ?STRG 6-19
0302	-B	71		-4	-8	FLR.+ABOVE	IN	SPEC		??	E	PK	0302	0279	0294	0301	4 C	1-	MONU	3200BC	1	R.4 ?STRG 6-21
0304	-B	71		-6		MIXED FILL	ASSC			SFT/BK	F	PK	----	----	----	0279	4 C	- 5 A	SETL	3200BC	1	RM.4 AREA 6-27
0305	-B	71		11	12	ROOM FILL	IN	SPEC		SOFT	G	PK	----	0280	0295	----	4 C	1-	MONU	3200BC	1	RM.6 WELL 6-30
0306	-B	71		-8A		LEVELLING	ASSC			BRICK	E	PK	----	----	----	----	4 C	1- 4 B 6	MONU	3200BC	1	AREA 2 8-2
0307	BM	71		-3A		MIXED FILL	ASSC			SFT/BK	F	PK	----	----	----	0290	4 C	- 5 A	SETL	3200BC	1	RM.1B AREA 8-3
0308	-B	71		-4	-8	FLR.+ABOVE	IN	SPEC		??	E	PK	0302	0279	0294	0301	4 C	1-	MONU	3200BC	1	R.4 ?STRG 8-2
0309	BWCW	71		-7	-7	WALLS	ASSC			BRICK	E	PK	----	----	0468	----	4 C	1-	SETL	3200BC	1	AREA G 8-4
0310	-B	71		21		UNDIF.FILL	NONE			SOFT	G	FPK	----	----	0323	0331	5 A	1-	SETL	3500BC	1	COURT 16 8-?
0311	-B	71		28		UNDIF.FILL	NONE			SFT/BK	E	PK	----	----	0314	0320	5 C	-	SETL	4000BC	1	8-11
0312	-B	71		27	-2	IN FLOORS	OUT		CORT	??	G	FPK	----	----	0320	0319	5 B	-	DOMS	3800BC	1	COURT 16 8-10
0313	-B	71		22	-1	IN FLOORS	NONE			HARD	E	FPK	----	1322	0316	0323	5 A	2-	SETL	3500BC	1	COURT 5 8-8
0314	-B	71		29		UNDIF.FILL	NONE			SFT/BK	E	PK	----	1370	0322	0311	5 C	-	SETL	4000BC	1	8-10
0315	-B	71		27		IN FLOORS	OUT		CORT	SOFT	G	FPK	----	----	0319	0317	5 B	-	DOMS	3800BC	1	COURT 16 8-9
0316	-B	71		23		IN FLOORS	NONE			SFT/BK	G	FPK	0316	1341	0318	0313	5 B	-	SETL	3800BC	1	UP.VB DEP.8-7
0317	-B	71		26		IN FLOORS	OUT		CORT	HARD	G	FPK	----	----	0315	0318	5 B	-	DOMS	3800BC	1	COURT 16 8-9
0318	-B	71		25		IN FLOORS	OUT		CORT	HARD	G	FPK	----	----	0317	0321	5 B	-	DOMS	3800BC	1	COURT 16 8-9
0319	-B	71		27	-1	IN FLOORS	OUT		CORT	HARD	E	FPK	----	----	0312	0315	5 B	-	DOMS	3800BC	1	COURT 16 8-10
0320	-B	71		27	3-5	IN FLOORS	NONE			HARD	G	PK	----	----	0311	0312	5 B	- 5 C	SETL	3800BC	1	8-10
0321	-B	71		24		IN FLOORS	NONE			SFT/BK	G	FPK	0316	1341	0318	0313	5 B	-	SETL	3800BC	1	UP.VB DEP.8-8
0322	-B	71		29	-1	FLR.+ABOVE	NONE			BRICK	G	PK	----	----	1369	0314	5 C	-	SETL	4000BC	1	8-12
0323	-B	71		22		FLR.+ABOVE	NONE			SOFT	E	FPK	----	1323	0313	0310	5 A	2-	SETL	3500BC	1	COURT 5 8-7
0325	-B	71		15		FLR.+ABOVE	NONE			SOFT	G	FPK	----	----	0333	----	4 C	- 5 A 1	SETL	3200BC	1	VA-1VC 8-3
0327	-B	71		13	3-4	IN FLOORS	IN	SPEC		BURNED	G	PK	----	----	0325	0295	4 C	2-	MONU	3200BC	1	RM.6 WELL 8-3
0329	-B	71		18	-1	ON FLOOR	NONE			HARD	E	FPK	----	----	0332	0335	5 A	1-	SETL	3500BC	1	COURT 16 8-4
0330	BM	71		-6	-2	IM.AB.FLR.	IN	SPEC		SOFT	G	PK	----	0327	0325	0293	4 C	2-	MONU	3200BC	1	RM.6 WELL 8-3
0331	-B	71		20		UNDIF.FILL	NONE			SOFT	E	FPK	----	----	0310	0329	5 A	1-	SETL	3500BC	1	COURT 16 8-4
0332	-B	71		19		IN FLOORS	NONE			SOFT	G	FPK	----	----	0323	0329	5 A	1-	SETL	3500BC	1	B.71.19+21 8-4
0333	-B	71		18		IM.AB.FLR.	NONE			HARD	E	FPK	0335	----	0329	0325	5 A	1-	SETL	3500BC	1	COURT 16 8-4
0335	-B	71		17		IM.AB.FLR.	NONE			HARD	E	FPK	0335	----	0329	0325	5 A	1-	SETL	3500BC	1	COURT 16 8-4
0337	-BC-	71		28		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	0337	0399	----	----	4 C	1-	MONU	3200BC	1	AREA 6 7-13
0342	-BC-	71		28		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	0337	0399	----	----	4 C	1-	MONU	3200BC	1	AREA 6 7-14

LOC	SQR	YR	TT	STR	FEA	FLR/FL/FTR	IN/X	ICX	ECX	FILL	Q	REC	SAME	CTTN	EARL	LATE	PERIOD	--PERIOD	SITE	DATE	C	COMMENT
0355	-BC-	71		28		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	0337	0399	----	----	4 C	1-	MONU	3200BC	1	AREA G 7-13
0360	-BC-	71		28	-1	SHAPED PIT	OUT		OP-N	??	E	PK	0360	0337	----	----	4 C	1-	MONU	3200BC	1	FROM 28 7-13
0362	-BC-	71		28	-1	SHAPED PIT	OUT		OP-N	??	E	PK	0360	0337	----	----	4 C	1-	MONU	3200BC	1	FROM 28 7-14
0377	-BC-	71		28		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	0337	0399	----	----	4 C	1-	MONU	3200BC	1	AREA G 7-12
0399	B-BW	71		-3		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	----	0542	0410	----	4 C	1-	MONU	3200BC	1	6-21 THRU 7-14
0409	B-BW	71		-7		ROOM FILL	OUT		OP-N	SOFT	G	PK	----	0549	0468	0410	4 C	1-	MONU	3200BC	1	AREA G 7-25
0410	B-BW	71		-6		IN FLOORS	OUT		OP-N	HARD	E	PK	----	0551	0409	0399	4 C	1-	MONU	3200BC	1	AREA G 7-24
0466	BWCW	71		11		FLR.+ABOVE	OUT		OP-F	GEL	E	PK	0466	0555	----	0468	4 C	2-	SETL	3200BC	1	AREA G 8-12
0467	BWCW	71		11		FLR.+ABOVE	OUT		OP-F	GEL	E	PK	0466	0555	----	0468	4 C	2-	SETL	3200BC	1	AREA G 8-14
0468	BWCW	71		-9	-2	FLR.+ABOVE	OUT		OP-N	SFT/BK	G	PK	----	----	0466	0309	4 C	1-	SETL	3200BC	1	AREA G 8-7
0469	BWCW	71		11		FLR.+ABOVE	OUT		OP-F	GEL	E	PK	0466	0555	----	0468	4 C	2-	SETL	3200BC	1	AREA G 8-11
0517	BW	71	1	-6		MIXED FILL	OUT		??	MIXED	F	PK	----	----	----	0536	4 C	- 6 A	MONU	3200BC	1	AREA G 6-28
0525	BW	71	2	-6		FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	----	0545	----	----	4 C	1-	MONU	3200BC	1	AREA G 7-3,10
0526	BW	71	1	-4		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	0526	0399	0536	0537	4 C	1-	MONU	3200BC	1	AREA G 6-27
0534	BW	71	2	-6	-3	FLR.+ABOVE	OUT		OP-N	HARD	G	PK	0534	----	----	----	4 C	1-	MONU	3200BC	1	DRAIN AREA 7-5
0536	BW	71	1	-5		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	----	----	0517	0526	4 C	1-	MONU	3200BC	1	AREA G 6-27
0537	BW	71	1	-2		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	----	0399	0526	----	4 C	1-	MONU	3200BC	1	AREA G 6-17
0539	BW	71	2	-5B		UNDIF.FILL	ASSC			BRICK	G	PK	----	----	0545	----	4 C	1-	MONU	3200BC	1	CORNER 7-8
0542	BW	71	2	-6	-2	FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	----	0399	0555	----	4 C	1-	MONU	3200BC	1	BUTTRESS 7-5
0543	BW	71	2	-7		FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	----	0551	0554	----	4 C	1-	MONU	3200BC	1	AREA G 7-6,7
0544	BW	71	1	-4		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	0526	0399	0536	0537	4 C	1-	MONU	3200BC	1	AR.G 6-29,7-1
0545	BW	71	2	-6B		ROOM FILL	ASSC			BRICK	G	PK	----	0542	----	0539	4 C	1-	MONU	3200BC	1	CORNER 7-10
0547	BW	71		-7	-4	FLR.+ABOVE	OUT		OP-N	SFT/BK	E	PK	----	0552	0555	----	4 C	1-	SETL	3200BC	1	AREA G 7-27
0549	BW	71		-7		FLR.+ABOVE	OUT		OP-N	SOFT	F	PK	----	0409	0468	0550	4 C	1-	MONU	3200BC	1	AREA G 7-22
0550	BW	71		-6		IN FLOORS	OUT		OP-N	HARD	F	PK	----	0543	0549	----	4 C	1-	MONU	3200BC	1	AREA G 7-22
0551	BW	71		-6		IN FLOORS	OUT		OP-N	HARD	G	PK	----	0543	----	----	4 C	1-	MONU	3200BC	1	AREA G 7-24
0552	BWCW	71		-7	-2	FLR.+ABOVE	OUT		OP-N	SFT/BK	E	PK	----	0547	0555	----	4 C	1-	SETL	3200BC	1	AREA G 7-25
0553	BW	71	2	-6	-3	FLR.+ABOVE	OUT		OP-N	HARD	G	PK	0534	----	----	----	4 C	1-	MONU	3200BC	1	DRAIN 7-29
0554	BW	71		-8	-2A	FLR.+ABOVE	ASSC			MIXED	F	PK	----	0549	0468	0543	4 C	1-	MONU	3200BC	1	AREA G 7-28
0555	BWCW	71		10		IN FLOORS	OUT		OP-F	GEL	G	PK	----	0466	----	0468	4 C	2-	MONU	3200BC	1	AREA G 8-8,9
0556	BW	71		-7	-6	WALLS	ASSC			SFT/BK	E	PK	----	0547	0555	----	4 C	1-	SETL	3200BC	1	AREA G 7-28
0698	-C	69	3	-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0698	0699	0729	----	6 A	-	SETL	4500BC	1	UNDER VC 8-14
0699	-C	70		-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0699	0698	0729	----	6 A	-	SETL	4500BC	1	UNDER VC 6-27
0700	-C	69		-7	13	FLR.+ABOVE	IN	RM1		BRICK	G	PK	----	1912	0698	0740	5 C	-	DOMS	4000BC	1	ROOM 10 7-31
0701	-D	69	1	11		UNDIF.FILL	NONE			HARD	G	RPK	0701	----	----	----	7 C	1-	SETL	5000BC	1	7-13
0702	-C	69		-1		UNDIF.FILL	NONE			BRICK	F	PK	0702	0716	0743	----	5 A	1- 5 B	SETL	3500BC	1	MXD.VA-B 6-19
0703	-C	70		-5	-1	UNSHAP.PIT	NONE			SOFT	P	PK	----	0783	----	----	4 B	- 6 A	SETL	2500BC	1	PIT 8 6-22
0704	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6 A	- 7 A	SETL	4500BC	1	MIXED 6-28
0705	-C	70		-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0699	0698	0729	----	6 A	-	SETL	4500BC	1	UNDER VC ?
0708	-C	70		-1	16	PLATFORM	ASSC			BRICK	G	PK	0708	0821	----	----	6 B	2-	SETL	4500BC	1	UP.PVG.2 7-11
0709	-C	69	1	-2	-4	LEVELLING	ASSC			RUBBLE	E	PK	----	0796	----	----	6 A	-	SETL	4500BC	1	RUBBLE 4 6-12
0710	-C	69	2	-5	-7	WALLS	ASSC			BRICK	F	FPK	----	----	0807	1342	5 B	-	DOMS	3800BC	1	WALL 5 7-8
0712	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5 C	- 6 B 1	SETL	4000BC	1	MIXED 7-17
0713	-C	70	5	-2		UNDIF.FILL	NONE			HARD	F	RPK	0713	0764	----	----	7 B	1- 7 B 6	DOMS	5000BC	1	7-19
0714	-C	69		-1	-9	LEVELLING	ASSC			RUBBLE	E	PK	0714	0796	----	----	6 A	-	SETL	4500BC	1	RUBBLE 4 6-28
0715	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5 C	- 6 B 1	SETL	4000BC	1	MIXED 7-24
0716	-C	69	1	-1		UNDIF.FILL	NONE			BRICK	F	PK	0716	0702	0743	----	5 A	1- 5 B	SETL	3500BC	1	MXD.VA-B 6-8
0717	-D	69	1	6-7		PLATFORM	NONE			BRICK	F	PK	----	0821	----	----	6 B	1- 6 B 2	SETL	4500BC	1	6-29
0718	-D	69		-3	-3	LEVELLING	ASSC			RUBBLE	E	PK	----	0729	----	0699	6 A	-	SETL	4500BC	1	RUBBLE 26 6-21
0719	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6 A	- 7 A	SETL	4500BC	1	MIXED 7-1
0720	-C	70		-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0699	0698	0729	----	6 A	-	SETL	4500BC	1	UNDER VC 6-24
0721	-C	69		-1	-9	LEVELLING	ASSC			RUBBLE	E	PK	0714	0796	----	----	6 A	-	SETL	4500BC	1	RUBBLE 4 8-2
0722	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5 C	- 6 B 1	SETL	4000BC	1	MIXED 8-2
0724	-D	69		-3		UNDIF.FILL	NONE			??	G	PK	----	----	----	0699	6 A	-	SETL	4500BC	1	UNDER VC 6-18
0726	-C	69	2	-5	-8	UNDIF.FILL	NONE			RUBBLE	F	PK	0726	----	----	----	5 A	- 5 C	SETL	3500BC	1	MIXD VC-A 7-9
0727	-C	70		-3	-1	DRAIN	ASSC			RUBBLE	E	PK	----	0167	0785	----	6 B	1-	SETL	4500BC	1	7-13
0728	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6 A	- 7 A	SETL	4500BC	1	MIXED 7-5
0729	-C	70		-1	-2	LEVELLING	ASSC			RUBBLE	E	PK	0729	----	0746	0699	6 A	-	SETL	4500BC	1	RUBBLE 14 6-30
0731	-C	70		-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0699	0698	0729	----	6 A	-	SETL	4500BC	1	UNDER VC 6-25
0732	-C	70	4	-1		UNDIF.FILL	ASSC			BRICK	G	PK	----	0174	0161	0708	7 A	-	DOMS	5000BC	1	"PLATFORM"7-18
0733	-C	69		-1		UNDIF.FILL	NONE			BRICK	F	PK	0702	0716	0743	----	5 A	1- 5 B	SETL	3500BC	1	MXD.VA-B 6-24
0735	-C	69		-1	-7	FLR.+ABOVE	IN	RM2		BRICK	G	FPK	0735	0743	1306	1342	5 B	-	DOMS	3800BC	1	ROOM 2 7-5
0736	-C	69		-5	-8	UNDIF.FILL	NONE			RUBBLE	F	PK	0726	----	----	----	5 A	- 5 C	SETL	3500BC	1	MIXD VC-A ?
0737	-C	70		1A		UNDIF.FILL	ASSC			BRICK	G	PK	0737	0174	0161	0708	7 A	-	DOMS	5000BC	1	"PLATFORM"7-16
0738	-C	70	2	-1	-1	LEVELLING	ASSC			RUBBLE	E	PK	0738	----	----	0729	6 A	-	SETL	4500BC	1	RUBBLE 6 7-7
0740	-C	69	2	-1		ROOM FILL	ASSC			BRICK	G	PK	0740	----	0700	0770	5 C	-	DOMS	4000BC	1	7-13
0741	-C	69		-1	-7	FLR.+ABOVE	IN	RM2		BRICK	G	FPK	0735	0743	1306	1342	5 B	-	DOMS	3800BC	1	ROOM 2 6-18
0742	-C	69		-1		UNDIF.FILL	NONE			BRICK	F	PK	0702	0716	0743	----	5 A	1- 5 B	SETL	3500BC	1	MXD.VA-B 6-21
0743	-C	69		-1	2-3	FLR.+ABOVE	IN	RM1		BRICK	G	FPK	0743	0735	1306	1342	5 B	-	DOMS	3800BC	1	ROOM 1 6-21
0745	-C	70		-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0699	0698	0729	----	6 A	-	SETL	4500BC	1	UNDER VC 7-4,7
0746	-C	70		-2		UNDIF.FILL	NONE			??	G	PK	0746	1914	0727	0729	6 B	1-	SETL	4500BC	1	7-2
0747	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6 A	- 7 A	SETL	4500BC	1	MIXED ?
0748	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6 A	- 7 A	SETL	4500BC	1	MIXED ?
0749	-D	69	1	11		UNDIF.FILL	NONE			HARD	G	RPK	0701	----	----	----	7 C	1-	SETL	5000BC	1	7-12
0751	-C	70	6	-6		UNDIF.FILL	ASSC			BRICK	G	PK	----	0174	0161	0708	7 A	-	DOMS	5000BC	1	"PLATFORM" 8-5
0752	-C	69	2	-5	-8	UNDIF.FILL	NONE			RUBBLE	F	PK	0726	----	----	----	5 A	- 5 C	SETL	3500BC	1	MIXD VC-A 7-12
0753	-C	70	2	-1	-1	LEVELLING	ASSC			RUBBLE	E	PK	0738	----	----	0729	6 A	-	SETL	4500BC	1	RUBBLE 6 7-8
0754	-C	70	5	-2		UNDIF.FILL	NONE			HARD	F	RPK	0713	0764	----	----	7 B	1- 7 B 6	DOMS	5000BC	1	7-22
0755	-C	69	1	-3		PLATFORM	NONE			BRICK	G	PK	0770	0807	0740	0735	5 C	-	SETL	4000BC	1	PAVING 6-12
0756	-C	69		-7	10	FLR.+ABOVE	IN	RM1		BRICK	G	PK	0844	0700	0698	0740	5 C	-	DOMS	4000BC	1	ROOM 1 7-21
0757	-C	70		1A		UNDIF.FILL	ASSC			BRICK	G	PK	0737	0174	0161	0708	7 A	-	DOMS	5000BC	1	"PLATFORM"7-18
0758	-C	69		-7	10	FLR.+ABOVE	IN	RM1		BRICK	G	PK	0844	0700	0698	0740	5 C	-	DOMS	4000BC	1	ROOM 1 7-22
0759	-C	70		-5	-2	FLR.+ABOVE	IN	RM1		BRICK	G	PK	----	0700	0698	0740	5 C	-	DOMS	4000BC	1	SOUTH RMS 6-23
0760	-C	69	2	-1		ROOM FILL	ASSC			BRICK	G	PK	0740	----	0700	0770	5 C	-	DOMS	4000BC	1	7-12
0761	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5 C	- 6 B 1	SETL	4000BC	1	MIXED 7-16
0763	-C	70	6	-3		MIXED FILL	ASSC			HARD	F	RPK	0763	0847	----	----	7 C	1- 7 C 2	SETL	5000BC	1	7-24
0764	-C	70	6	-1		UNDIF.FILL	NONE			HARD	F	RPK	----	0713	----	----	7 B	1- 7 B 6	DOMS	5000BC	1	7-23
0765	-C	70	5	-2		UNDIF.FILL	NONE			HARD	F	RPK	0713	0764	----	----	7 B	1- 7 B 6	DOMS	5000BC	1	7-20
0766	-C	70		-1	16	PLATFORM	ASSC			BRICK	G	PK	0708	0821	----	----	6 B	2-	SETL	4500BC	1	UP.PVG.2 7-15
0768	-C	69		-7	11	FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	----	0700	0698	0740	5 C	-	DOMS	4000BC	1	OUTSIDE 7-21
0769	-C	69		-7	-4	FLR.+ABOVE	IN	RM1		BRICK	G	PK	----	0700	0698	0740	5 C	-	DOMS	4000BC	1	ROOM 14 7-31
0770	-C	69		-3		PLATFORM	NONE			BRICK	G	PK	0770	0807	0740	0735	5 C	-	SETL	4000BC	1	PAVING 7-24
0772	-C	69		-1	2-3	FLR.+ABOVE	IN	RM1		BRICK	G	FPK	0743	0735	1306	1342	5 B	-	DOMS	3800BC	1	ROOM 1 6-28
0773	-C	69		-1	9A	LEVELLING	ASSC			RUBBLE	G	PK	----	----	----	0714	6 A	-	SETL	4500BC	1	PROB.CONTXT8-7
0774	-C	69	1	-1		UNDIF.FILL	NONE			BRICK	F	PK	0716	0702	0743	----	5 A	1- 5 B	SETL	3500BC	1	MXD.VA-B 6-10
0775	-C	69		-5	-6	FOUNDATION	ASSC			RUBBLE	P	PK	0739	----	0726	----	4 C	- 5	MONU	3200BC	1	IVC DITCH 7-2
0776	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5 C	- 6 B 1	SETL	4000BC	1	MIXED 7-26
0777	-C	69		-1		UNDIF.FILL	NONE			BRICK	F	PK	0702	0716	0743	----	5 A	1- 5 B	SETL	3500BC	1	MXD.VA-B 6-23
0779	-C	69		-7	20	LEVELLING	NONE			RUBBLE	E	PK	----	----	----	0820	6 B	2-	SETL	4500BC	1	6-2[illegible]
0780	-C	70	5	-7		GRAVE	OUT		OP-N	GEL	G	PK	0780	----	----	----	7 B	-	SETL	5000BC	1	BURIAL#2 7-28
0782	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5 C	- 6 B 1	SETL	4000BC	1	MIXED 7-30
0783	-C	69		-5	-5	UNSHAP.PIT	NONE			SOFT	P	PK	----	0703	----	----	4 B	- 6 A	SETL	2500BC	1	PIT8 6/30-7/2

LOC	SQR	YR	TT	STR	FEA	FLR/FL/FTR	IN/X	ICX	ECX	FILL	Q	REC	SAME	CTMN	EARL	LATE	PERIOD			--PERIOD			SITE	DATE	C	COMMENT	
0784	-C	70		-1	16	PLATFORM	ASSC			BRICK	G	PK	0708	0821	----	----	6	B	2-				SETL	4500BC	1	UP.PVG.2	7-14
0785	-C	70	7	-2		UNDIF.FILL	NONE			BRICK	G	PK	0785	0794	----	0727	6	B	2-				SETL	4500BC	1		8-9
0788	-C	69	1	-1		UNDIF.FILL	NONE			BRICK	F	PK	0716	0702	0743	----	5	A	1-	5	B		SETL	3500BC	1	MXD.VA-B	6-9
0789	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5	C	-	6	B	1	SETL	4000BC	1	MIXED	7-27
0791	-C	69		-3		PLATFORM	NONE			BRICK	G	PK	0770	0807	0740	0735	5	C	-				SETL	4000BC	1	PAVING	7-14
0792	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6	A	-	7	A		SETL	4500BC	1	MIXED	6-29
0793	-C	70	3	-1		UNDIF.FILL	ASSC			BRICK	G	PK	----	0174	0161	0708	7	A	-				DOMS	5000BC	1	"PLATFORM"	7-9
0794	-C	70	5	-3		UNDIF.FILL	NONE			BRICK	G	PK	0794	0785	----	0727	6	B	2-				SETL	4500BC	1		7-21
0795	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6	A	-	7	A		SETL	4500BC	1	MIXED	7-6
0796	-C	69		-1	-4	LEVELLING	ASSC			RUBBLE	E	PK	0796	0714	----	----	6	A	-				SETL	4500BC	1	RUBBLE 4	6-24
0797	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5	C	-	6	B	1	SETL	4000BC	1	MIXED	7-29
0799	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5	C	-	6	B	1	SETL	4000BC	1	MIXED	8-3
0800	-D	69		-2		FOUNDATION	ASSC			HARD	G	PK	----	----	----	----	5	C	-				DOMS	4000BC	1	FDTN TRCH	6-17
0801	-C	69		-7	-2	FLR.+ABOVE	IN	RM1		BRICK	G	PK	----	0700	0698	0740	5	C	-				DOMS	4000BC	1	ROOM 3	7-30
0802	-C	69		-1	-4	LEVELLING	ASSC			RUBBLE	E	PK	0796	0714	----	----	6	A	-				SETL	4500BC	1	RUBBLE 4	6-25
0803	-C	70	5	-3		UNDIF.FILL	NONE			BRICK	G	PK	0794	0785	----	0727	6	B	2-				SETL	4500BC	1		7-19
0805	-C	70		-1	-2	LEVELLING	ASSC			RUBBLE	E	PK	0729	----	0746	0699	6	A	-				SETL	4500BC	1	RUBBLE 14	?
0806	-C	70		-1	16	PLATFORM	ASSC			BRICK	G	PK	0708	0821	----	----	6	B	2-				SETL	4500BC	1	UP.PVG.2	7-13
0807	-C	69		-5		PLATFORM	NONE			BRICK	G	PK	----	0770	0740	0735	5	C	-				SETL	4000BC	1		6-29
0808	-C	69		-7	-7	FLR.+ABOVE	IN	RM3		BRICK	G	PK	----	0700	0698	0740	5	C	-				DOMS	4000BC	1	ROOM 12	7-31
0809	-C	69		-1	-7	FLR.+ABOVE	IN	RM2		BRICK	G	FPK	0735	0743	1306	1342	5	B	-				DOMS	3800BC	1	ROOM 2	6-22
0810	-C	69		-1	-4	LEVELLING	ASSC			RUBBLE	E	PK	0796	0714	----	----	6	A	-				SETL	4500BC	1	RUBBLE 4	6-26
0811	-C	69		-7	17	FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	----	0700	0698	0740	5	C	-				DOMS	4000BC	1	OUTSIDE	7-27
0812	-C	69		-4		WALLS	ASSC			BRICK	F	PK	----	----	----	0714	6	A	-				SETL	4500BC	1	RET.WALLS	6-28
0813	-C	70	6	-2		UNDIF.FILL	NONE			HARD	G	RPK	0813	0816	----	----	7	C	1-				SETL	5000BC	1	BURIALS	7-27
0814	-C	70	7	-2		UNDIF.FILL	NONE			BRICK	G	PK	0785	0794	----	0727	6	B	2-				SETL	4500BC	1		8-6
0815	-C	70	7	-4		UNDIF.FILL	ASSC			BRICK	G	PK	0815	0174	0161	0708	7	A	-				DOMS	5000BC	1	"PLATFORM"	8-15
0816	-C	70	5	-4		UNDIF.FILL	NONE			HARD	G	RPK	0816	0813	----	----	7	C	1-				SETL	5000BC	1		7-21
0817	-C	70	5	-7		MIXED FILL	OUT		OP-N	GEL	G	RPK	0780	----	----	----	7	D	-				SETL	5000BC	1		7-?
0819	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5	C	-	6	B	1	SETL	4000BC	1	MIXED	7-28
0820	-C	69		7A		UNDIF.FILL	NONE			BRICK	G	PK	0820	1349	0779	----	6	B	1-				SETL	4500BC	1		8-10
0821	-C	70	6	-5		UNDIF.FILL	NONE			BRICK	G	PK	0821	0708	----	----	6	B	2-				SETL	4500BC	1		8-4
0822	-C	70	7	-4	-2	IN.AB.FLR.	IN	RM3		RUBBLE	G	PK	----	----	----	0815	7	A	-				DOMS	5000BC	1		8-10
0824	-C	70	6	-3		MIXED FILL	ASSC			HARD	F	RPK	0763	0847	----	----	7	C	1-	7	C	2	SETL	5000BC	1		7-28
0825	-C	69		7A		UNDIF.FILL	NONE			BRICK	G	PK	0820	1349	0779	----	6	B	1-				SETL	4500BC	1		8-9
0827	-C	70	5	-7		MIXED FILL	OUT		OP-N	GEL	G	RPK	0780	----	----	----	7	D	-				SETL	5000BC	1		7-29
0829	-C	70	6	-3		MIXED FILL	ASSC			HARD	F	RPK	0763	0847	----	----	7	C	1-	7	C	2	SETL	5000BC	1		7-30
0831	-C	70	6	-2		UNDIF.FILL	NONE			HARD	G	RPK	0813	0816	----	----	7	C	1-				SETL	5000BC	1		7-26
0832	-C	70	7	-4		UNDIF.FILL	ASSC			BRICK	G	PK	0815	0174	0161	0708	7	A	-				DOMS	5000BC	1	"PLATFORM"	8-13
0833	-C	70	5	-8		UNDIF.FILL				HARD	F	RPK	----	0160	----	----	7	E	-				DOMS	5000BC	1	STERILE SOIL	
0834	-C	69		-1	-7	FLR.+ABOVE	IN	RM2		BRICK	G	FPK	0735	0743	1306	1342	5	B	-				DOMS	3800BC	1	ROOM 2	6-14
0836	-C	70	5	-4		UNDIF.FILL	NONE			HARD	G	RPK	0816	0813	----	----	7	C	1-				SETL	5000BC	1		7-22
0837	-C	70	1	-1		UNDIF.FILL	ASSC			BRICK	G	PK	----	0174	0161	0708	7	A	-				DOMS	5000BC	1	"PLATFORM"	7-6
0839	-C	70	5	-2		UNDIF.FILL	NONE			HARD	F	RPK	0713	0764	----	----	7	B	1-	7	B	6	DOMS	5000BC	1		7-21
0842	-C	70	5	-5		UNDIF.FILL	ASSC			BRICK	G	PK	----	0174	0161	0708	7	A	-				DOMS	5000BC	1	"PLATFORM"	7-21
0843	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6	A	-	7	A		SETL	4500BC	1	MIXED	7-11
0844	-C	69		-7	-9	FLR.+ABOVE	IN	RM1		BRICK	G	PK	0844	0700	0698	0740	5	C	-				DOMS	4000BC	1	ROOM 1	7-22
0846	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5	C	-	6	B	1	SETL	4000BC	1	MIXED	7-15
0847	-C	70	5	-6		MIXED FILL	ASSC			HARD	F	RPK	----	0763	----	----	7	C	1-	7	C	2	SETL	5000BC	1		7-25
0848	-C	69	3	-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0698	0699	0729	----	6	A	-				SETL	4500BC	1	UNDER VC	8-13
0849	-C	70		-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0699	0698	0729	----	6	A	-				SETL	4500BC	1	UNDER VC	6-28
0850	-C	70	5	-7		MIXED FILL	OUT		OP-N	GEL	G	RPK	0780	----	----	----	7	D	-				SETL	5000BC	1	MNY SHRDS	7-27
0851	-C	70		-2		UNDIF.FILL	NONE			??	G	PK	0746	1914	0727	0729	6	B	1-				SETL	4500BC	1		7-1
0852	-C	70	6	-2		UNDIF.FILL	NONE			HARD	G	RPK	0813	0816	----	----	7	C	1-				SETL	5000BC	1		7-28
0853	-C	69		-1	-9	LEVELLING	ASSC			RUBBLE	E	PK	0714	0796	----	----	6	A	-				SETL	4500BC	1	RUBBLE 4	6-30
0854	-C	70	6	-5		UNDIF.FILL	NONE			BRICK	G	PK	0821	0708	----	----	6	B	2-				SETL	4500BC	1		8-3
0855	-C	70	6	-7		MIDDEN	OUT		OP-N	ASHY	G	FPK	----	0185	----	0187	7	B	2-				DOMS	5000BC	1		8-18
0856	-C	70		-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0699	0698	0729	----	6	A	-				SETL	4500BC	1	UNDER VC	7-9
0857	-C	69		-3		PLATFORM	NONE			BRICK	G	PK	0770	0807	0740	0735	5	C	-				SETL	4000BC	1	PAVING	8-4
0858	-C	69		-1	-9	LEVELLING	ASSC			RUBBLE	E	PK	0714	0796	----	----	6	A	-				SETL	4500BC	1	RUBBLE 4	8-6
0859	-D	69		2-3		UNDIF.FILL	NONE			??	F	PK	----	----	----	----	5	C	-	6	A		SETL	4000BC	1		6-18
0861	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5	C	-	6	B	1	SETL	4000BC	1	MIXED	8-10
0862	-C	70	7	-3		UNDIF.FILL	ASSC			BRICK	G	PK	----	0174	0161	0708	7	A	-				DOMS	5000BC	1	"PLATFORM"	8-10
0863	-C	69	2	-5	-8	UNDIF.FILL	NONE			RUBBLE	F	PK	0726	----	----	----	5	A	-	5	C		SETL	3500BC	1	MIXD VC-A	7-10
0864	-C	69		-5	-8	UNDIF.FILL	NONE			RUBBLE	F	PK	0726	----	----	----	5	A	-	5	C		SETL	3500BC	1	MIXD VC-A	8-4
0865	-C	69		-1	-4	LEVELLING	ASSC			RUBBLE	E	PK	0796	0714	----	----	6	A	-				SETL	4500BC	1	RUBBLE 4	8-4
0866	-C	70		1A		UNDIF.FILL	ASSC			BRICK	G	PK	0737	0174	0161	0708	7	A	-				DOMS	5000BC	1	"PLATFORM"	7-15
0867	-C	70	6	-4		MIXED FILL	OUT		OP-N	GEL	G	RPK	----	0850	----	----	7	D	-				SETL	5000BC	1	[illegible]	8-1
0868	-C	70	2	-1		WALLS	ASSC			BRICK	F	PK	----	----	----	0738	6	A	-	6	B	1	SETL	4500BC	1	RETAIN.WLS	7-[illegible]
0872	-C	69		-7	14	IN.AB.FLR.	IN	RM1		BRICK	E	PK	----	0700	0698	0740	5	C	-				DOMS	4000BC	1	ROOM 6	7-[illegible]
0873	-C	69		-7	12	HEARTH	IN	RM1		BURNED	E	FPK	0844	0700	0698	0740	5	C	-				DOMS	4000BC	1	HEARTH A	7-23
0874	-C	69		-7	-3	FLR.+ABOVE	IN	RM1		BRICK	G	PK	----	0700	0698	0740	5	C	-				DOMS	4000BC	1	ROOM 4	7-31
0876	-E	69	3	-2		FLR.+ABOVE	IN	RM3		BRICK	G	PK	0881	0885	0883	----	7	B	5-	7	B	6	DOMS	5000BC	1	ROOM 22	6-14
0877	-E	69	3	-2		FLR.+ABOVE	IN	RM3		BRICK	G	PK	----	0881	0883	----	7	B	5-	7	B	6	DOMS	5000BC	1	+T7.4=885	6-23
0878	-E	69	3	-2		FLR.+ABOVE	IN	RM3		BRICK	G	PK	0881	0885	0883	----	7	B	5-	7	B	6	DOMS	5000BC	1	ROOM 22	6-29
0880	-E	69	2	-8		IN FLOORS	OUT		OP-N	HARD	G	PK	0880	0887	----	0888	7	B	6-				DOMS	5000BC	1	BLDG.SFS.	7-14
0881	-E	69	3	-2	-1	FLR.+ABOVE	IN	RM3		BRICK	G	PK	0881	0885	0883	----	7	B	5-	7	B	6	DOMS	5000BC	1	-N.BK.RM22	6-25
0883	-E	69	3	-2		FLR.LEVEL	IN	RM3		ASHY	G	PK	----	----	0887	----	7	B	5-	7	B	6	DOMS	5000BC	1	ROOM 22	6-24
0884	-E	69	2	-4	-5	FLR.+ABOVE	IN	RM3		BRICK	G	PK	----	----	----	----	7	B	6-				DOMS	5000BC	1	ROOM 7	7-15
0885	-E	69	7	-4	-1	FLR.+ABOVE	IN	RM1		BRICK	G	PK	0885	0881	0887	----	7	B	5-	7	B	6	DOMS	5000BC	1	ROOM 21	6-26
0886	-E	69	2	-3		FLR.+ABOVE	OUT		OP-N	??	E	PK	----	----	0876	----	7	B	2-				DOMS	5000BC	1	BETW.1+2	6-26
0887	-E	69	3	12		IN FLOORS	OUT		OP-N	SFT/BK	G	PK	----	0880	----	----	7	B	6-				DOMS	5000BC	1	BLDG.SFS.	7-13
0888	-E	69	2	-5		FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	----	----	0880	----	7	B	6-				DOMS	5000BC	1		7-13
0889	-E	69	7	-4	-1	FLR.+ABOVE	IN	RM1		BRICK	G	PK	0885	0881	0887	----	7	B	5-	7	B	6	DOMS	5000BC	1	ROOM 21	6-12
0892	-E	69	2	-8		IN FLOORS	OUT		OP-N	HARD	G	PK	0880	0887	----	0888	7	B	6-				DOMS	5000BC	1	BLDG.SFS.	7-13
0893	-E	69	3	11		IN FLOORS	OUT		OP-N	HARD	G	PK	----	----	0887	----	7	B	6-				DOMS	5000BC	1	AGNST WLL	7-22
1302	CH	73	1	-3	-1	IN FLOORS	OUT		OP-N	GEL	P	PK	----	----	1305	1303	4	C	2-				MONU	3200BC	1	UNSEALED	6-21
1303	CH	73	1	-3		UNDIF.FILL	ASSC			RUBBLE	P	PK	1303	----	1302	----	4	B	-	4	C		SETL	2500BC	1	?48 FOUND.	6-21
1304	CH	73	1	-5		IN FLOORS	OUT		OP-N	GEL	G	PK	----	1307	----	1305	4	C	2-				MONU	3200BC	1		6-23
1305	CH	73		-1		ROOM FILL	OUT		OP-N	??	G	PK	----	----	1304	1302	4	C	2-				MONU	3200BC	1		6-24
1306	CH	73	1	-6		PLATFORM	NONE			BRICK	G	PK	----	0770	0740	0735	5	C	-				SETL	4000BC	1	PAVNG.6-24,26	
1307	CH	73		-3		IN FLOORS	OUT		OP-N	SOFT	G	PK	----	1304	----	1305	4	C	2-				MONU	3200BC	1		6-24
1308	CH	73		-5		PLATFORM	NONE			BRICK	G	PK	----	0770	0740	0735	5	C	-				SETL	4000BC	1	PAVING	6-25
1309	CH	73	1	-5	-4	WALLS	ASSC			BRICK	P	PK	----	----	----	1305	4	C	2-				MONU	3200BC	1	UNSEALED	6-26
1310	CH	73		-7		UNSHAP.PIT	OUT		OP-N	SOFT	P	PK	----	----	----	----	4	C	-	6	A		SETL	3200BC	1	BEVEL-RIM BWLS	
1311	CH	73		-5	-1	UNSHAP.PIT	NONE			SOFT	P	PK	----	----	----	----	4	B	-	6	A		SETL	2500BC	1	PIT 9	6-28
1313	CH	73	1	-3		UNDIF.FILL	ASSC			RUBBLE	P	PK	1303	----	1302	----	4	B	-	4	C		SETL	2500BC	1	?48 FOUND.	7-3
1314	-B	73		-2		FLR.+ABOVE	NONE			ASHY	G	FPK	1314	0325	1320	----	5	A	1-				SETL	3500BC	1	COURT 16	7-10
1315	-B	73		-2		FLR.+ABOVE	NONE			ASHY	G	FPK	1314	0325	1320	----	5	A	1-				SETL	3500BC	1	COURT 16	7-11
1316	-B	73		-2		FLR.+ABOVE	NONE			ASHY	G	FPK	1314	0325	1320	----	5	A	1-				SETL	3500BC	1	COURT 16	7-12
1317	-B	73		-2		FLR.+ABOVE	NONE			ASHY	G	FPK	1314	0325	1320	----	5	A	1-				SETL	3500BC	1	COURT 16	7-14
1318	-B	73		-2		FLR.+ABOVE	NONE			ASHY	G	FPK	1314	0325	1320	----	5	A	1-				SETL	3500BC	1	COURT 16	7-15

LOC	SQR	YR	TT	STR	FEA	FLR/FL/FTR	IN/X	ICX	ECX	FILL	Q	REC	SAME	CTMN	EARL	LATE	PERIOD	--PERIOD	SITE	DATE	C	COMMENT	
1320	-B	73		-3		FLR.+ABOVE	NONE			ASHY	G	FPK	1320	----	1326	1314	5 A	1-	SETL	3500BC	1	COURT 16	7-17
1321	-B	73		-3		FLR.+ABOVE	NONE			ASHY	G	FPK	1320	----	1326	1314	5 A	1-	SETL	3500BC	1	COURT 16	7-16
1322	-B	73		-4	-?	IN FLOORS	NONE			WATER	G	FPK	1322	0313	1341	1323	5 A	2-	SETL	3500BC	1	COURT 5	7-19
1323	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A	2-	SETL	3500BC	1	COURT 5	7-19
1324	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A	2-	SETL	3500BC	1	COURT 5	7-25
1325	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A	2-	SETL	3500BC	1	COURT 5	7-18
1326	-B	73		-3	-4	UNDIF.FILL	NONE			RUBBLE	G	FPK	----	----	1337	1320	5 A	1-	SETL	3500BC	1	RUBBLE	7-17
1327	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1[illegible]	5 A	2-	SETL	3500BC	1	COURT 5	7-21
1329	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1[illegible]	5 A	2-	SETL	3500BC	1	COURT 5	7-22
1331	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A	2-	SETL	3500BC	1	COURT 5	7-23
1332	-B	73		-4	-2	IN FLOORS	NONE			WATER	G	FPK	1322	0313	1341	1323	5 A	2-	SETL	3500BC	1	COURT 5	7-23
1333	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A	2-	SETL	3500BC	1	COURT 5	7-24
1334	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A	2-	SETL	3500BC	1	COURT 5	7-25
1335	-B	73		-3		FLR.+ABOVE	NONE			ASHY	G	FPK	1320	----	1326	1314	3 A	1-	SETL	3500BC	1	COURT 16	7-25
1336	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A	2-	SETL	3500BC	1	COURT 5	7-28
1337	-B	73		-3	-5	FLR.+ABOVE	ASSC			??	G	FPK	----	----	1323	1326	5 A	1-	SETL	3500BC	1	BETW.WALLS	7-28
1338	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A	2-	SETL	3500BC	1	COURT 5	7-29
1339	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A	2-	SETL	3500BC	1	COURT 5	7-30
1340	CW	73		-2	-2	WALLS	ASSC			BRICK	G	FPK	----	----	----	----	4 C	2-	MONU	3200BC	1	IN WALL	7-31
1341	-B	73		-5		IN FLOORS	NONE			LAMIN.	G	FPK	1341	0316	1354	1322	5 B	-	SETL	3800BC	1	UP.VB DEP.	7-31
1342	-B	73		-6		IN FLOORS	OUT		CORT	WATER	G	FPK	1342	1355	1348	1354	5 B	-	DOMS	3800BC	1	COURT 16	8-1
1343	-B	73		-5		IN FLOORS	NONE			LAMIN.	G	FPK	1341	0316	1354	1322	5 B	-	SETL	3800BC	1	UP.VB DEP.	8-1
1344	-B	73		-5		IN FLOORS	NONE			LAMIN.	G	FPK	1341	0316	1354	1322	5 B	-	SETL	3800BC	1	UP.VB DEP.	8-2
1345	-B	73		-6		IN FLOORS	OUT		CORT	WATER	G	FPK	1342	1355	1348	1354	5 B	-	DOMS	3800BC	1	COURT 16	8-2
1346	CW	73	3			LEVELLING	ASSC			RUBBLE	E	PK	----	0714	----	----	6 A	-	SETL	4500BC	1	RUBBLE 4	8-4
1347	-B	73		-6		IN FLOORS	OUT		CORT	WATER	G	FPK	1342	1355	1348	1354	5 B	-	DOMS	3800BC	1	COURT 16	8-4
1348	-B	73		-6	-2	IN FLOORS	OUT		CORT	WATER	G	FPK	----	----	1356	1342	5 B	-	DOMS	3800BC	1	COURT 16	8-4,5
1349	CW	73	3	-2		UNDIF.FILL	NONE			SFT/BK	G	PK	----	1377	----	----	6 B	1-	SETL	4500BC	1		8-4
1350	CW	73	3	-1		LEVELLING	ASSC			RUBBLE	E	PK	----	0714	----	----	6 A	-	SETL	4500BC	1	RUBBLE 4	8-5
1351	-B	73		-6		IN FLOORS	OUT		CORT	WATER	G	FPK	1342	1355	1348	1354	5 B	-	DOMS	3800BC	1	COURT 16	8-6
1352	-B	73		-5		IN FLOORS	NONE			LAMIN.	G	FPK	1341	0316	1354	1322	5 B	-	SETL	3800BC	1	UP.VB DEP.	8-8
1353	-B	73		-6		IN FLOORS	OUT		CORT	WATER	G	FPK	1342	1355	1348	1354	5 B	-	DOMS	3800BC	1	COURT 16	8-7
1354	-B	73		-5	-1	IM.AB.FLR.	NONE			BURNED	E	FPK	----	----	1342	1341	5 B	-	SETL	3800BC	1	UP.16 SURF.	8-9
1355	-B	73		-6	-3	DEPRESSION	NONE			ORGANC	G	FPK	1355	1342	----	1354	5 B	-	DOMS	3800BC	1	DEPRES.15	8-9
1356	-B	73		-6	-4	IN FLOORS	OUT		CORT	WATER	G	FPK	1356	----	1368	1348	5 B	-	DOMS	3800BC	1	COURT 16	8-12
1357	-B	73		-6	-3	DEPRESSION	NONE			ORGANC	G	FPK	1355	1342	----	1354	5 B	-	DOMS	3800BC	1	DEPRES.15	8-12
1358	-B	73		-5	-4	UNDIF.FILL	NONE			HARD	G	FPK	----	----	1354	1341	5 B	-	SETL	3800BC	1	NE CORNER	8-11
1359	-B	73		-6	-3	DEPRESSION	NONE			ORGANC	G	FPK	1355	1342	----	1354	5 B	-	DOMS	3800BC	1	DEPRES.15	8-11
1360	-B	73		-6	-4	IN FLOORS	OUT		CORT	WATER	G	FPK	1356	----	1368	1348	5 B	-	DOMS	3800BC	1		8-13
1361	-B	73		-6		IN FLOORS	OUT		CORT	WATER	G	FPK	1342	1355	1348	1354	5 B	-	DOMS	3800BC	1	COURT 16	8-13
1362	-B	73		-5	-2	FLR.+ABOVE	IN	TOMB		ASHY	G	FPK	----	1341	1354	1322	5 B	-	STRC	3800BC	1	ROOM 11	8-12
1363	BK	73	2	-2		UNDIF.FILL	NONE			??	F	PK	----	----	----	----	5 A	- 5 B	DOMS	3500BC	1	MXD.VA-B	8-13
1364	BW	73	2	-1	-1	WALLS	ASSC			BRICK	G	FPK	----	----	----	----	4 C	2-	MONU	3200BC	1	IN WALL	8-12
1365	-B	73		-6		IN FLOORS	OUT		CORT	WATER	G	FPK	1342	1355	1348	1354	5 B	-	DOMS	3800BC	1	COURT 16	8-15
1366	-B	73		-6	-3	DEPRESSION	NONE			ORGANC	G	FPK	1355	1342	----	1354	5 B	-	DOMS	3800BC	1	DEPRES.15	8-14
1367	-B	73	1	-1	-1	IN FLOORS	NONE			WATER	G	FPK	----	----	1370	1368	5 B	-	SETL	3800BC	1		8-16
1368	-B	73	1	-1		UNDIF.FILL	NONE			SOFT	G	FPK	----	----	1367	1356	5 B	-	SETL	3800BC	1		8-15
1369	-B	73	1	-3		FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	1369	----	----	1370	5 C	-	DOMS	4000BC	1	WALL FALL	8-16
1370	-B	73	1	-2		UNDIF.FILL	NONE			ASHY	G	PK	1370	0314	13[illegible]	0770	5 C	-	SETL	4000BC	1		8-16
1371	-B	73	1	-3		FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	1369	----	----	1370	5 C	-	DOMS	4000BC	1	WALL FALL	8-18
1372	-B	73	1	-2		UNDIF.FILL	NONE			ASHY	G	PK	1370	0314	1369	0770	5 C	-	SETL	4000BC	1		8-18
1373	-B	73	1	-3	-1	MIDDEN	NONE			SOFT	G	PK	1373	----	1376	----	7 A	-	SETL	5000BC	1		8-18
1374	-B	73	1	-3	-1	MIDDEN	NONE			SOFT	G	PK	1373	----	1376	----	7 A	-	SETL	5000BC	1		8-19
1375	-B	73	1	-3	-1	MIDDEN	NONE			SOFT	G	PK	1373	----	1376	----	7 A	-	SETL	5000BC	1		8-20
1376	-B	73	1	-3	-5	MIDDEN	NONE			ORGANC	G	PK	----	----	----	1373	7 A	-	SETL	5000BC	1		8-18
1377	BW	73	2	-3		UNDIF.FILL	NONE			SOFT	G	PK	----	1349	----	----	6 B	1-	SETL	4500BC	1		8-13,14
1901	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER	6-24
1902	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER	6-23
1903	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER	6-24
1904	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER	6-24
1905	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER	6-27
1906	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER	6-26
1907	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER	6-25
1908	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER	6-28
1909	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER	6-28
1910	CDE-	73		-1	5-6	WALLS	ASSC			BRICK	F	PK	----	----	----	----	5 C	-	DOMS	4000BC	1	WALL	6-30
1911	CDE-	73		-5	-7	UNSHAP.PIT	NONE			SOFT	P	PK	1911	----	----	----	4 B	- 7 B 2	SETL	2500BC	1	PIT 20	7-3
1912	CDE-	73		-1	-8	FLR.+ABOVE	IN	RM1		BRICK	F	PK	----	0700	1917	----	5 C	-	DOMS	4000BC	1	ROOM 16	7-3,4
1913	CDE-	73		-1	-9	FLR.+ABOVE	OUT		OP-N	BRICK	F	PK	----	0700	1917	----	5 C	-	DOMS	4000BC	1	OUTSIDE	7-3,5
1914	CDE-	73		-3		UNDIF.FILL	NONE			HARD	G	PK	1914	0820	1922	----	6 B	1-	SETL	4500BC	1	YELW.CLAY	7-8
1915	CDE-	73		-2	10	LEVELLING	ASSC			RUBBLE	G	PK	1915	0718	1917	1928	6 A	-	SETL	4500BC	1	RUBBLE 26	7-9
1916	CDE-	73		-2	10	LEVELLING	ASSC			RUBBLE	G	PK	1915	0718	1917	1928	6 A	-	SETL	4500BC	1	RUBBLE 26	7-10
1917	CDE-	73		-2		LEVELLING	NONE			RUBBLE	G	PK	----	0698	1915	----	6 A	-	SETL	4500BC	1	UNDER VC	7-9
1918	CDE-	73		-2	10	LEVELLING	ASSC			RUBBLE	G	PK	1915	0718	1917	1928	6 A	-	SETL	4500BC	1	RUBBLE 26	7-11
1919	CDE-	73		-3		UNDIF.FILL	NONE			HARD	G	PK	1914	0820	1922	----	6 B	1-	SETL	4500BC	1	YEL.CLAY	7-11
1920	CDE-	73		-3		UNDIF.FILL	NONE			HARD	G	PK	1914	0820	1922	----	6 B	1-	SETL	4500BC	1	YEL.CLAY	7-10
1921	CDE-	73		2-3		UNDIF.FILL	NONE			HARD	F	PK	----	----	----	----	6 B	1- 6 B 2	SETL	4500BC	1	MXD.RUBBLE	7-14
1922	CDE-	73		-2	13	LEVELLING	ASSC			RUBBLE	G	PK	1922	0718	1917	1928	6 A	-	SETL	4500BC	1	RUBBLE 26	7-11
1923	CDE-	73		-3	10	MIXED FILL	NONE			??	F	PK	----	----	----	----	6 B	1- 6 B 2	SETL	4500BC	1	MIXED	7-17
1924	CDE-	73		-2	13	LEVELLING	ASSC			RUBBLE	G	PK	1922	0718	1917	1928	6 A	-	SETL	4500BC	1	RUBBLE 26	7-16
1925	CDE-	73		-2	18	LEVELLING	NONE			RUBBLE	G	PK	1925	1932	----	----	6 B	2-	SETL	4500BC	1	RUBBLE 18	7-21
1926	CDE-	73		-2	18	LEVELLING	NONE			RUBBLE	G	PK	1925	1932	----	----	6 B	2-	SETL	4500BC	1	RUBBLE 18	7-22
1927	CDE-	73		-2	20	WALLS	ASSC			BRICK	F	PK	----	----	----	----	6 B	1- 6 B 2	SETL	4500BC	1	FROM WALL	7-22
1928	CDE-	73		-2	11	WALLS	ASSC			BRICK	F	PK	----	----	----	1915	6 A	-	SETL	4500BC	1	WLS.17+18	7-21
1929	CDE-	73		-5	-7	UNSHAP.PIT	NONE			SOFT	P	PK	1911	----	----	----	4 B	- 7 B 2	SETL	2500BC	1	PIT 20	7-23
1930	CDE-	73		-2	18	LEVELLING	NONE			RUBBLE	G	PK	1925	1932	----	----	6 B	2-	SETL	4500BC	1	RUBBLE 18	7-23
1931	CDE-	73	1	-4		UNDIF.FILL	OUT		??	BRICK	F	PK	1931	----	----	----	6 B	2- 7 A	DOMS	4500BC	1		7-24
1932	CDE-	73		-3	18	LEVELLING	NONE			RUBBLE	G	PK	----	1925	----	----	6 B	2-	SETL	4500BC	1	RUBBLE 18	7-24
1933	CDE-	73		-4		UNDIF.FILL	OUT		??	BRICK	F	PK	1931	----	----	----	6 B	2- 7 A	DOMS	4500BC	1		7-26
1934	CDE-	73	1	-4		UNDIF.FILL	OUT		??	BRICK	F	PK	1931	----	----	----	6 B	2- 7 A	DOMS	4500BC	1		7-24
1935	CDE-	73		-4		UNDIF.FILL			??	BRICK	F	PK	1935	----	----	----	7 A	- 7 B 2	DOMS	5000BC	1		7-29
1936	CDE-	73		-4		UNDIF.FILL			??	BRICK	F	PK	1935	----	----	----	7 A	- 7 B 2	DOMS	5000BC	1		7-28
1937	CDE-	73		-4		UNDIF.FILL			??	BRICK	F	PK	1935	----	----	----	7 A	- 7 B 2	DOMS	5000BC	1		7-30
1938	CDE-	73	1	-4		UNDIF.FILL	OUT		??	BRICK	F	PK	1935	----	----	----	7 A	- 7 B 2	DOMS	5000BC	1		7030
1939	CDE-	73		-4		UNDIF.FILL			??	BRICK	F	PK	1935	----	----	----	7 A	- 7 B 2	DOMS	5000BC	1		7-31
1940	CDE-	73		-4		UNDIF.FILL			??	BRICK	F	PK	1935	----	----	----	7 A	- 7 B 2	DOMS	5000BC	1		8-1
1941	CDE-	73	2	-5		FLR.+ABOVE	ASSC			BRICK	G	PK	1941	----	----	----	7 B	4-	DOMS	5000BC	1		8-2
1942	CDE-	73	2	-5		FLR.+ABOVE	ASSC			BRICK	G	PK	1941	----	----	----	7 B	4-	DOMS	5000BC	1		8-1
2101	-C	73		-5		FLR.LEVEL	ASSC			??	F	FPK	----	----	----	----	7 B	2- 7 B 3	DOMS	5000BC	1	CLEANUP VIIB2	
2102	-C	73		-1	-1	IN FLOORS	OUT		OP-N	LAMIN.	G	FPK	----	2103	2106	0201	7 B	2-	DOMS	5000BC	1		6-21
2103	-C	73		-1	1-2	IN FLOORS	OUT		OP-N	LAMIN.	G	FPK	----	2102	2106	0201	7 B	2-	DOMS	5000BC	1		6-23
2104	-C	73	1	-1		IN FLOORS	OUT		OP-N	LAMIN.	G	FPK	----	2102	2106	0201	7 B	2-	DOMS	5000BC	1		6-24

LOC	SQR	YR	TT	STR	FEA	FLR/FL/FTR	IN/X	ICX	ECX	FILL	Q	REC	SAME	CTMN	EARL	LATE	PERIOD			--PERIOD			SITE	DATE	C	COMMENT
2105	-C	73	1	1-2		MIXED FILL	OUT		OP-N	SO/BRK	F	PK	----	----	----	----	7	B	2-	7	B	3	DOMS	5000BC	1	6-23
2106	-C	73	1	-2		FLR.+ABOVE	OUT		OP-N	BRICK	E	FPK	2106	----	2113	2104	7	B	3-				DOMS	5000BC	1	6-24
2107	-C	73	1	-2		FLR.+ABOVE	OUT		OP-N	BRICK	E	FPK	2106	----	2113	2104	7	B	3-				DOMS	5000BC	1	6-25
2108	-C	73		-3		FLR.+ABOVE	OUT		OP-N	SOFT	G	FPK	----	2113	2110	2106	7	B	3-				DOMS	5000BC	1	INC T1 6-25,26
2109	-C	73	1	-5		FLR.+ABOVE	OUT		OP-N	SOFT	E	FPK	----	----	----	2113	7	B	3-				DOMS	5000BC	1	6-28
2110	-C	73	1	-4		FLR.+ABOVE	OUT		OP-N	SOFT	E	FPK	----	----	----	2113	7	B	3-				DOMS	5000BC	1	6-28
2111	-C	73	1			FLR.LEVEL	ASSC			??	F	FPK	----	----	----	----	7	B	2-	7	B	3	DOMS	5000BC	1	EXC.V11B2 RMS.
2112	-C	73		-6		FLR.+ABOVE	NONE			ASHY	E	PK	----	----	----	----	7	B	3-	7	B	6	DOMS	5000BC	1	W.OF T1 7-1,2
2113	-C	73	1	-3		FLR.+ABOVE	OUT		OP-N	LAMIN.	G	FPK	2113	2108	2110	2106	7	B	3-				DOMS	5000BC	1	7-3,4
2114	-C	73	1	6-8		UNDIF.FILL	NONE			HARD	G	RPK	----	2117	----	----	7	C	1-				DOMS	5000BC	1	= C.73.7 7-14
2115	-C	73	1	-8		FLR.+ABOVE	ASSC			BRICK	G	RPK	----	----	----	----	7	B	4-	7	B	6	DOMS	5000BC	1	7-9,10
2116	-C	73	1	-3		FLR.+ABOVE	OUT		OP-N	LAMIN.	G	FPK	2113	2108	2110	2106	7	B	3-				DOMS	5000BC	1	7-4
2117	-C	73		6-9		UNDIF.FILL	NONE			BRICK	G	RPK	2117	2114	----	----	7	C	1-				DOMS	5000BC	1	= C.73.7 7-15
2118	-C	73	1	-9		UNDIF.FILL	ASSC			BRICK	G	RPK	2118	2119	----	----	7	C	2-				DOMS	5000BC	1	7-11
2119	-C	73	2	-9		UNDIF.FILL	ASSC			BRICK	G	RPK	2119	2126	----	----	7	C	2-				DOMS	5000BC	1	7-19
2120	-C	73	2	-9		UNDIF.FILL	ASSC			BRICK	G	RPK	2119	2126	----	----	7	C	2-				DOMS	5000BC	1	7-17,18
2121	-C	73		6-9		UNDIF.FILL	NONE			BRICK	G	RPK	2117	2114	----	----	7	C	1-				DOMS	5000BC	1	= C.73.7 7-16
2122	-C	73	1	-9		UNDIF.FILL	ASSC			BRICK	G	RPK	2118	2119	----	----	7	C	2-				DOMS	5000BC	1	7-22
2123	-C	73	2	-9		UNDIF.FILL	ASSC			BRICK	G	RPK	2119	2126	----	----	7	C	2-				DOMS	5000BC	1	7-21
2124	-C	73		6-9		UNDIF.FILL	NONE			BRICK	G	RPK	2117	2114	----	----	7	C	1-				DOMS	5000BC	1	= C.73.7 7-16
2125	-C	73	1	-9		UNDIF.FILL	ASSC			BRICK	G	RPK	2118	2119	----	----	7	C	2-				DOMS	5000BC	1	7-23
2126	-C	73		-9		FLR.+ABOVE	ASSC			BRICK	G	PK	2126	2118	----	----	7	C	2-				DOMS	5000BC	1	7-25,26
2127	-C	73		-9		FLR.+ABOVE	ASSC			BRICK	G	PK	2126	2118	----	----	7	C	2-				DOMS	5000BC	1	7-24,25
2128	-C	73		-9		FLR.+ABOVE	ASSC			BRICK	G	PK	2126	2118	----	----	7	C	2-				[illegible]	[illegible]	[illegible]	7-26
2129	-C	73		-9		FLR.+ABOVE	ASSC			BRICK	G	PK	2126	2118	----	----	7	C	2-				DOMS	5000BC	1	7-28
2301	-D	73		-6	31	FLR.+ABOVE	ASSC			SANDY	G	FPK	----	----	2302	----	7	B	1-				DOMS	5000BC	1	7-23
2302	-D	73		-7	31	FLR.+ABOVE	ASSC			SANDY	E	FPK	----	2304	----	----	7	B	3-				DOMS	5000BC	1	7-23
2303	-D	73		-6	27	ON FLOOR	IN	RM1		BURNED	E	FPK	----	0187	----	----	7	B	2-				DOMS	5000BC	1	ROOM 25 7-31
2304	-D	73		-7	43	UNDIF.FILL	OUT		OP-N	LAMIN.	G	FPK	----	2306	2305	----	7	B	3-				DOMS	5000BC	1	8-1
2305	-D	73		-8	43	UNDIF.FILL	OUT		OP-N	LAMIN.	G	FPK	----	----	----	2304	7	B	4-				DOMS	5000BC	1	8-5
2306	-D	73		-7	44	UNDIF.FILL	OUT		OP-N	LAMIN.	G	FPK	----	2304	----	----	7	B	3-				DOMS	5000BC	1	8-5
2307	-D	73		-7	42	MIDDEN	OUT		OP-N	ASHY	G	OTH	2307	----	----	----	7	B	3-	7	B	5	DOMS	5000BC	1	PART SCRND 8-8
2308	-D	73		-7	42	MIDDEN	OUT		OP-N	ASHY	G	OTH	2307	----	----	----	7	B	3-	7	B	5	DOMS	5000BC	1	PART SCRND 8-7
2309	-D	73		-7	42	MIDDEN	OUT		OP-N	ASHY	G	OTH	2307	----	----	----	7	B	3-	7	B	5	DOMS	5000BC	1	PART SCRND 8-7
3704	-A	75	7	11	-2	FLR.+ABOVE	IN	RM1		??	E	DRY	3704	----	3721	3706	4	C	2-				MONU	3[illegible]	[illegible]	ROOM#1 UPR 8-6
3706	-A	75	7	11		ROOM FILL	ASSC			SOFT	G	FK	3706	----	3704	----	4	C	1-				MONU	32[illegible]	[illegible]	UPPER FILL 8-5
3707	-A	75	7	11		ROOM FILL	ASSC			SOFT	G	DRY	3706	----	3704	----	4	C	1-				MONU	3200BC	1	UPPER FILL 8-5
3709	-A	75	7	11	2B	IM.AB.FLR.	IN	RM1		??	E	DRY	3709	----	----	3721	4	C	2-				MONU	3200BC	1	ROOM#1 LWR 8-6
3710	-A	75	7	11	2B	IM.AB.FLR.	IN	RM1		??	E	PK	3709	----	----	3721	4	C	2-				MONU	3200BC	1	ROOM#1 LWR 8-6
3711	-A	75	7	11	-2	FLR.+ABOVE	IN	RM1		??	E	PK	3704	----	3721	3706	4	C	2-				MONU	3200BC	1	ROOM#1 UPR 8-6
3712	-A	75	7	11	-3	FLR.+ABOVE	OUT		CORT	??	E	PK	3712	----	3746	3706	4	C	2-				MONU	3200BC	1	CRT#C UPR 8-6
3713	-A	75	7	11	-3	FLR.+ABOVE	OUT		CORT	??	E	DRY	3712	----	3746	3706	4	C	2-				MONU	3200BC	1	CRT#C UPR 8-6
3715	-A	75		11		ROOM FILL	ASSC			SOFT	G	PK	3706	----	3759	----	4	C	1-				MONU	3200BC	1	W.SIDE 8-7
3718	-A	75		11		ROOM FILL	ASSC			SOFT	G	PK	3706	----	3759	----	4	C	1-				MONU	3200BC	1	UPPER FILL 8-7
3719	-A	75		11	-3	FLR.+ABOVE	OUT		CORT	??	E	PK	3712	----	3746	3706	4	C	2-				MONU	3200BC	1	CRT#C UPR 8-7
3721	-A	75		11	2A	IM.AB.FLR.	IN	RM1		??	E	PK	3721	----	3709	3704	4	C	2-				MONU	3200BC	1	ROOM#1 MID 8-9
3722	-A	75		11	2B	IM.AB.FLR.	IN	RM1		??	E	PK	3709	----	----	3721	4	C	2-				MONU	3200BC	1	ROOM#1 LWR 8-9
3724	-A	75		11		ROOM FILL	ASSC			SOFT	G	DRY	3706	----	3734	----	4	C	1-				MONU	3200BC	1	UPPER FILL 8-9
3728	-A	75		11	2B	IM.AB.FLR.	IN	RM1		??	E	PK	3709	----	----	3721	4	C	2-				MONU	3200BC	1	RM#1 LWR 8-10
3732	-A	75		11	-2	FLR.+ABOVE	IN	RM1		??	E	PK	3704	----	3721	3706	4	C	2-				MONU	3200BC	1	RM#1 UPR 8-10
3733	-A	75		11		ROOM FILL	ASSC			SOFT	G	PK	3706	----	3734	----	4	C	1-				MONU	3200BC	1	UPPR.FILL 8-10
3734	-A	75		11	-6	FLR.+ABOVE	IN	RM1		??	E	PK	----	----	3751	3706	4	C	2-				MONU	3200BC	1	RM#D UPR 8-10
3736	-A	75		11	2A	IM.AB.FLR.	IN	RM1		??	E	PK	3721	----	3709	3704	4	C	2-				MONU	3200BC	1	RM#1 MID 8-10
3737	-A	75		11	-3	FLR.+ABOVE	OUT		CORT	??	E	DRY	3712	----	3746	3706	4	C	2-				MONU	3200BC	1	CRT#C UPR 8-11
3738	-A	75		11	-3	FLR.+ABOVE	OUT		CORT	??	E	PK	3712	----	3746	3706	4	C	2-				MONU	3200BC	1	CRT#C UPR 8-11
3742	-A	75		11	-7	ROOM FILL	IN	RM2		??	G	PK	----	----	3758	3706	4	C	2-				MONU	3200BC	1	RM#E 8-11
3743	-A	75		11	2B	IM.AB.FLR.	IN	RM1		??	E	PK	3709	----	----	3721	4	C	2-				MONU	3200BC	1	RM#1 LWR 8-11
3745	-A	75		11	-3	FLR.+ABOVE	OUT		CORT	??	E	PK	3712	----	3746	3706	4	C	2-				MONU	3200BC	1	CRT#C UPR 8-12
3746	-A	75		11	3A	IM.AB.FLR.	OUT		CORT	??	E	PK	3746	----	----	3712	4	C	2-				MONU	3200BC	1	CRT#C LWR 8-12
3749	-A	75		11	-3	FLR.+ABOVE	OUT		CORT	??	E	DRY	3712	----	3746	3706	4	C	2-				MONU	3200BC	1	CRT#C UPR 8-12
3750	-A	75		11	3A	IM.AB.FLR.	?IN		CORT	??	E	PK	3746	----	----	3712	4	C	2-				MONU	3200BC	1	CRT#C LWR 8-13
3751	-A	75		11	6A	IM.AB.FLR.	IN	RM1		??	E	PK	----	----	----	3734	4	C	2-				MONU	3200BC	1	RM#D LWR 8-13
3752	-A	75		11	3A	IM.AB.FLR.	OUT		CORT	??	E	DRY	3746	----	----	3712	4	C	2-				MONU	3200BC	1	CRT#C LWR 8-13
3753	-A	75		11	3A	IM.AB.FLR.	OUT		CORT	??	E	DRY	3746	----	----	3712	4	C	2-				MONU	3200BC	1	CRT#C LWR 8-13
3755	-A	75		11	-8	FLR.+ABOVE	OUT		OP-N	??	G	DRY	3755	----	----	3706	4	C	2-				MONU	3200BC	1	AREA#A 8-13
3756	-A	75		11	3A	IM.AB.FLR.	OUT		CORT	??	E	DRY	3746	----	----	3712	4	C	2-				MONU	3200BC	1	CRT#C LWR 8-14
3757	-A	75		11	-9	DRAIN	OUT		OP-N	??	E	PK	----	3755	----	3706	4	C	2-				MONU	3200BC	1	DRAIN FILL8-14
3758	-A	75		11	-7A	IM.AB.FLR.	IN	RM2		ASHY	E	PK	----	----	3770	3742	4	C	2-				MONU	3200BC	1	RM#E UPR 8-14
3759	-A	75		11	-5	FLR.+ABOVE	OUT		OP-N	??	G	PK	3759	----	----	3706	4	C	2-				MONU	3200BC	1	W.SIDE#B 8-14
3761	-A	75		11	3A	IM.AB.FLR.	OUT		CORT	??	E	PK	3746	----	----	3712	4	C	2-				MONU	3200BC	1	CRT#C LWR 8-14
3762	-A	75		11	-5	FLR.+ABOVE	OUT		OP-N	??	G	PK	3759	----	----	3706	4	C	2-				MONU	3200BC	1	W.SIDE#B 8-16
3763	-A	75		11	-5	FLR.+ABOVE	OUT		OP-N	??	G	DRY	3759	----	----	3706	4	C	2-				MONU	3200BC	1	W.SIDE#B 8-14
3764	-A	75		11	-5	FLR.+ABOVE	OUT		OP-N	??	G	DRY	3759	----	----	3706	4	C	2-				MONU	3200BC	1	W.SIDE#B 8-16
3765	-A	75		11	-8	FLR.+ABOVE	OUT		OP-N	??	G	DRY	3755	----	----	3706	4	C	2-				MONU	3200BC	1	AREA#A 8-16
3766	-A	75		11	-8	FLR.+ABOVE	OUT		OP-N	??	G	PK	3755	----	----	3706	4	C	2-				MONU	3200BC	1	AREA#A 8-16
3767	-A	75		11		ROOM FILL	ASSC			SOFT	G	DRY	3706	----	----	----	4	C	1-				MONU	3200BC	1	MIXD.FILL 8-17
3768	-A	75	8	12		UNDIF.FILL	??			??	F	PK	----	----	3769	3755	4	C	-	6			SETL	3200BC	1	MIXED 8-19
3769	-A	75	8	13		PLATFORM	??			BRICK	G	PK	----	----	3771	3768	6		-				SETL	4500BC	1	BV-RM.BWL 8-19
3770	-A	75		11	7B	UNDIF.FILL	IN	RM2		??	E	PK	----	----	----	3758	4	C	2-				MONU	3200BC	1	RM#E LWR. 8-16
3771	-A	75	8	14		PLATFORM	??			BRICK	E	PK	----	----	3772	3769	6		-				SETL	4500BC	1	BV-RM.BWL 8-19
3772	-A	75	8	15		UNDIF.FILL	??			SFT/BK	G	PK	----	----	----	3771	6		-				SETL	4500BC	1	BV-RM.BWL 8-19

LOC	SQR	YR	TT	STR	FEA	FLR/FL/FTR	IN/X	ICX	ECX	FILL	Q	REC	SAME	CTMN	EARL	LATE	PERIOD	--PERIOD		SITE	DATE	C	COMMENT
3501	R37-	73		-3		ROOM FILL	OUT		ALLY	SOFT	E	FPK	----	----	3507	3510	7 5	-		DOMS	5000BC	1	=3560 UPPR 7-3
3502	R37-	73		-3	-1	WALLS	ASSC			SOFT	G	FPK	3502	----	3504	3510	7 5	- 7 6	E	DOMS	5000BC	1	BETW.WALLS 7-3
3503	R37-	73		W-1		UNDIF.FILL	NONE			??	G	FPK	----	3513	3522	3519	8	-		SETL	5500BC	1	CUL+NONCUL 7-3
3504	R37-	73		5A5		FLR.+ABOVE	IN	RM3		SOFT	G	FPK	----	3556	3507	3502	7 4	-		DOMS	5000BC	1	ROOM#A 7-3
3505	R37-	73		W-3		NAT.DEP.	NONE			WATER	E	FPK	3505	----	3530	3522	8	-		SETL	5500BC	1	NATRL SILT 7-3
3506	R37-	73		-2		ROOM FILL	IN	RM3		SOFT	G	FPK	----	3535	3501	3510	7 6	C- 7 6	D	DOMS	5000BC	1	MOSTLY RM9 7-3
3507	R37-	73		-6		MIXED FILL	ASSC			SOFT	F	FPK	----	----	3511	3504	7 3	- 7 4		DOMS	5000BC	1	=3560LWR 7-3/4
3509	R37-	73		1-5							P	FPK	----	----	----	----	7 4	- 7 6	E	DOMS	5000BC	1	MIXED 7-3
3510	R37-	73		-1		SURFACE	ASSC			SOFT	P	FPK	----	----	3506	----	7 6	E-		SETL	5000BC	1	SURFACE 7-3
3511	R37-	73		-6	-1	ROOM FILL	ASSC			ASHY	E	FPK	----	----	3515	3507	7 2	-		DOMS	5000BC	1	=T1.22.1 7-3/4
3512	R37-	73		W-1	W-?	UNDIF.FILL	NONE			??	G	FPK	----	3513	3505	3519	8	-		SETL	5500BC	1	CULT+NONCULT ?
3513	R37-	73		14		UNDIF.FILL	NONE			SOFT	E	FPK	3513	----	3525	3519	8	-		SETL	5500BC	1	CULTURAL 7-5
3514	R37-	73		11		UNDIF.FILL	NONE			ASHY	E	FPK	3514	----	3519	3521	8	-		SETL	5500BC	1	OCCP.DEBRIS ?
3515	R37-	73		-7		MIXED FILL	ASSC			SOFT	F	FPK	----	3518	3518	3511	7 1	- 7 2		DOMS	5000BC	1	MOSTLY PH2 7-4
3516	R37-	73		-7	-1	FLR.+ABOVE	ASSC			BRICK	E	FPK	----	----	3520	3518	7 1	-		DOMS	5000BC	1	?WALLFALL 7-4
3517	R37-	73		17		NAT.DEP.	NONE			WATER	E	FPK	3505	----	3530	3522	8	-		SETL	5500BC	1	NATRL SILT ?
3518	R37-	73		-8		FLR.+ABOVE	ASSC			SFT/BK	E	FPK	----	3515	3516	3515	7 1	-		DOMS	5000BC	1	BLW 7S;=7N 7-5
3519	R37-	73		12		UNDIF.FILL	NONE			ASHY	E	FPK	----	----	3513	3514	8	-		SETL	5500BC	1	OCCP.DEBRIS ?
3520	R37-	73		-9		FLR.LEVEL	ASSC			GEL	E	FPK	----	----	3521	3516	7 1	-		DOMS	5000BC	1	GEL FLOOR 7-4
3521	R37-	73		10		UNDIF.FILL	NONE			HARD	E	FPK	----	----	3514	3520	8	-		SETL	5500BC	1	OCCP.DEBRIS ?
3522	R37-	73		16		NAT.DEP.	NONE			WATER	E	FPK	----	----	3505	3525	8	-		SETL	5500BC	1	WATER DEP. 7-7
3523	R37-	73		11		UNDIF.FILL	NONE			ASHY	E	FPK	3514	----	3519	3521	8	-		SETL	5500BC	1	ON SURFACE 7-7
3524	R37-	73		17		NAT.DEP.	NONE			WATER	E	FPK	3505	----	3530	3522	8	-		SETL	5500BC	1	NATRL.SILT 7-7
3525	R37-	73		15		NAT.DEP.	NONE			WATER	E	FPK	----	----	3522	3513	8	-		SETL	5500BC	1	NATRL.SILT 7-7
3526	R37-	73		21		NAT.DEP.	NONE			RUBBLE	E	FPK	----	----	3527	3529	8	-		SETL	5500BC	1	GRAVELS 7-7
3527	R37-	73		22		NAT.DEP.	NONE			WATER	E	FPK	----	----	----	3526	8	-		SETL	5500BC	1	NATRL.SILT 7-8
3528	R37-	73		14		UNDIF.FILL	NONE			SOFT	E	FPK	3513	----	3525	3519	8	-		SETL	5500BC	1	CULTURAL 7-7
3529	R37-	73		19		NAT.DEP.	NONE			WATER	E	FPK	----	----	3526	3530	8	-		SETL	5500BC	1	FINE SILT 7-7
3530	R37-	73		18		NAT.DEP.	NONE			WATER	E	FPK	----	----	3529	3505	8	-		SETL	5500BC	1	WATER DEP. 7-8
3531	R37-	73	1	-1	-2	SURFACE	ASSC			SOFT	P	FPK	----	3573	3543	3537	7 6	E-		SETL	5000BC	1	SURF.SOIL 7-21
3532	R37-	73	1	-5	-2	ROOM FILL	OUT		ALLY	ASHY	E	FPK	----	3550	3549	3568	7 6	C-		DOMS	5000BC	1	ALLEY 7-23
3533	R37-	73	1	-4	-5	LEVELLING	ASSC			GEL	E	FPK	----	----	3533	3542	7 5	-		DOMS	5000BC	1	FDN.LVLNG 7-24
3534	R37-	73	1	-3	-7	WALLS	ASSC			SOFT	G	FPK	3502	----	3556	3566	7 5	- 7 6		DOMS	5000BC	1	BTW.WALLS 7-22
3535	R37-	73	1	-3	-9	LEVELLING	ASSC			SFT/BK	E	FPK	----	3564	----	3573	7 6	D-		DOMS	5000BC	1	=3506 NTH 7-23
3536	R37-	73	1	-2	3-1	MIXED FILL	IN	RM3		MIXED	G	FPK	----	3547	3555	3543	7 6	D-		DOMS	5000BC	1	ROOM#3 7-22
3537	R37-	73	1	-5		SURFACE				SOFT	P	FPK	----	3540	3574	----	7 6	E-		DOMS	5000BC	1	SURF.DEP. 7-21
3538	R37-	73	1	-6		LEVELLING	ASSC			GEL	E	FPK	----	3571	3548	----	7 6	C- 7 6	D	DOMS	5000BC	1	RM#6 FULL 7-22
3539	R37-	73	1	-4	-3	IM.AB.FLR.	IN	RM3		ASHY	E	FPK	----	----	3542	3567	7 5	-		DOMS	5000BC	1	ROOM#1 7-24
3540	R37-	73	1	-5	-1	MIXED FILL				SOFT	F	FPK	----	3537	3574	----	7 6	E-		SETL	5000BC	1	SURF.DEP. 7-21
3541	R37-	73	1	5-8	-2	FLR.+ABOVE	OUT		ALLY	ASHY	G	FPK	----	----	----	3568	7 6	C-		DOMS	5000BC	1	=3549+50 7-23
3542	R37-	73	1	-4	-4	IM.AB.FLR.	IN	RM3		SOFT	E	FPK	----	----	3533	3539	7 5	-		DOMS	5000BC	1	ROOM#1 7-24
3543	R37-	73	1	-2	-2	MIXED FILL	IN	RM3		SOFT	E	FPK	3543	3570	3547	3531	7 6	E-		SETL	5000BC	1	ROOM#2 7-22
3544	R37-	73	1	-2	-2	MIXED FILL	IN	RM3		SOFT	E	FPK	3543	3570	3547	3531	7 6	E-		SETL	5000BC	1	ROOM#2 7-22
3545	R37-	73	1	-2	-4	LEVELLING	ASSC			RUBBLE	E	FPK	----	3571	3546	3574	7 6	C- 7 6	D	DOMS	5000BC	1	RM#4 FILL 7-21
3546	R37-	73	1	-9		FLR.+ABOVE	IN	RM3		SOFT	G	FPK	----	----	3551	3545	7 5	-		DOMS	5000BC	1	ROOM#4 7-23
3547	R37-	73	1	-2	2-2	IM.AB.FLR.	IN	RM3		SFT/BK	E	FPK	----	3546	3565	3543	7 6	D-		DOMS	5000BC	1	ROOM#2 7-22
3548	R37-	73	1	-7		IM.AB.FLR.	IN	RM3		SOFT	E	FPK	----	3567	----	3538	7 5	-		DOMS	5000BC	1	ROOM#6 7-23
3549	R37-	73	1	-8		FLR.+ABOVE	OUT		ALLY	ASHY	E	FPK	----	3555	----	3550	7 6	C-		DOMS	5000BC	1	"ROOM#5" 7-24
3550	R37-	73	1	-5		ROOM FILL	OUT		ALLY	ASHY	E	FPK	----	3532	3549	3564	7 6	C-		DOMS	5000BC	1	"ROOM#5" 7-23
3551	R37-	73	1	24		MIXED FILL	ASSC			MIXED	G	FPK	----	----	----	3546	7 4	- 7 5		DOMS	5000BC	1	MID.=RM#B 8-1
3552	R37-	73	1	15		LEVELLING	ASSC			BRICK	E	FPK	----	----	----	3555	7 6	A-		DOMS	5000BC	1	RM#E FILL 8-1
3553	R37-	73	1	25		FLR.+ABOVE	ASSC			SOFT	E	FPK	----	----	3518	3511	7 2	-		DOMS	5000BC	1	=3515 STH. 8-2
3554	R37-	73	1	21		LEVELLING	ASSC			GEL	E	FPK	----	----	----	3556	7 4	-		DOMS	5000BC	1	=3551 LWR.7-31
3555	R37-	73	1	14		ROOM FILL	ASSC			SOFT	E	FPK	----	----	3552	----	7 6	C-		DOMS	5000BC	1	RM#E AREA 7-29
3556	R37-	73	1	19		IN FLOORS	IN	RM3		MIXED	G	FPK	----	3504	3554	3533	7 4	-		DOMS	5000BC	1	22LRS=R#A 7-31
3557	R37-	73	1	18		FLR.+ABOVE	OUT		ALLY	SOFT	E	FPK	3557	----	3563	----	7 5	-		DOMS	5000BC	1	OCC.DEBRS.7-29
3558	R37-	73	1	-8							F	FPK	----	----	----	----	7 2	- 7 6	C	DOMS	5000BC	1	MIXED:8-25 ?
3559	R37-	73	1	22		IN FLOORS	ASSC			SOFT	G	FPK	----	----	3511	3556	7 3	-		DOMS	5000BC	1	=3507 STH. 8-1
3560	R37-	73	1	17		IN FLOORS	OUT		ALLY	ASHY	G	FPK	----	----	----	3535	7 3	- 7 5		DOMS	5000BC	1	114CM THK 7-31
3561	R37-	73	1	23		IN FLOORS	OUT		ALLY	MIXED	G	FPK	----	3551	----	3563	7 4	-		DOMS	5000BC	1	MID=9FLRS.7-31
3562	R37-	73	1	18		FLR.+ABOVE	OUT		ALLY	SOFT	E	FPK	3557	----	3563	----	7 5	-		DOMS	5000BC	1	OCC.DEBRS.7-30
3563	R37-	73	1	20		FLR.+ABOVE	OUT		ALLY	HARD	E	FPK	----	----	3561	3557	7 5	-		DOMS	5000BC	1	ALLEY 7-30
3564	R37-	73	1	-3	-8	LEVELLING	ASSC			GEL	G	FPK	----	3572	3550	3566	7 6	D-		DOMS	5000BC	1	LEVELING 7-22
3565	R37-	73	1	26		MIXED FILL	ASSC			MIXED	G	FPK	----	----	----	3547	7 5	- 7 6	C	DOMS	5000BC	1	LOW=ROOM#D ?
3566	R37-	73	1	-2	-1	ROOM FILL	ASSC			HARD	F	FPK	----	3543	3572	3574	7 6	E-		SETL	5000BC	1	DEBRIS 7-17
3567	R37-	73	1	-4		MIXED FILL	IN	RM3		SOFT	G	FPK	----	3548	3539	3571	7 5	-		DOMS	5000BC	1	ROOM#1 7-19
3568	R37-	73	1	-3	-2	ROOM FILL	OUT	??	ALLY	ASHY	E	FPK	----	3572	3532	3566	7 6	D-		DOMS	5000BC	1	ALLEY 7-17
3569	R37-	73	1	-2		UNDIF.FILL	ASSC			SOFT	F	FPK	----	----	3535	3574	7 6	E-		SETL	5000BC	1	BELOW SUR.7-18
3570	R37-	73	1	-2	-3	ROOM FILL	IN	RM3		SOFT	E	FPK	----	3543	3536	3573	7 6	E-		SETL	5000BC	1	ROOM#3+9 7-19
3571	R37-	73	1	-3		LEVELLING	ASSC			GEL	E	FPK	----	3545	3567	3566	7 6	C- 7 6	D	DOMS	5000BC	1	RM#1 FILL 7-17
3572	R37-	73	1	-3	-6	ROOM FILL	OUT		ALLY	SOFT	E	FPK	----	3568	3532	3566	7 6	C- 7 6	D	DOMS	5000BC	1	TOP=LVLNG 7-19
3573	R37-	73	1	-1	-3	SURFACE	ASSC			SOFT	P	FPK	----	3531	3570	3537	7 6	E-		SETL	5000BC	1	MXD.W/74 7-18
3574	R37-	73	1	-1	-1	SURFACE	ASSC			SOFT	P	FPK	----	3573	3569	3537	7 6	E-		SETL	5000BC	1	SURF.DEP. 7-16

APPENDIX 3-B

EXCAVATION UNITS SORTED BY TEMPORAL UNIT

See Appendix 1 for explantation of abbreviations

LOC	SQR	YR	TT	STR	FEA	FLR/FL/FTR	IN/X	ICY	ECX	FILL	Q	REC	SAME	CTMN	EARL	LATE	PERIOD		--PERIOD			SITE	DATE	C	COMMENT
1303	CW	73	1	-3		UNDIF.FILL	ASSC			RUBBLE	P	PK	1303	----	1302	----	4	B	- 4	C		SETL	2500BC	1	?4B FOUND.6-21
1313	CW	73	1	-3		UNDIF.FILL	ASSC			RUBBLE	P	PK	1303	----	1302	----	4	B	- 4	C		SETL	2500BC	1	?4B FOUND. 7-3
1311	CW	73		-5	-1	UNSHAP.PIT	NONE			SOFT	P	PK	----	----	----	----	4	B	- 6	A		SETL	2500BC	1	PIT 9 6-28
0783	-C	69		-5	-5	UNSHAP.PIT	NONE			SOFT	P	PK	----	0703	----	----	4	B	- 6	A		SETL	2500BC	1	PIT8 6/30-7/2
0703	-C	70		-5	-1	UNSHAP.PIT	NONE			SOFT	P	PK	----	0783	----	----	4	B	- 6	A		SETL	2500BC	1	PIT 8 6-22
1911	CDE-	73		-5	-7	UNSHAP.PIT	NONE			SOFT	P	PK	1911	----	----	----	4	B	- 7	B	2	SETL	2500BC	1	PIT 20 7-3
1929	CDE-	73		-5	-7	UNSHAP.PIT	NONE			SOFT	P	PK	1911	----	----	----	4	B	- 7	B	2	SETL	2500BC	1	PIT 20 7-23
0775	-C	69		-5	-6	FOUNDATION	ASSC			RUBBLE	P	PK	0739	----	0726	----	4	C	- 5			MONU	3200BC	1	IVC DITCH 7-2
0304	-B	71		-6		MIXED FILL	ASSC			SFT/BK	F	PK	----	----	----	0279	4	C	- 5	A		SETL	3200BC	1	RM.4 AREA 6-27
0307	BM	71		-3A		MIXED FILL	ASSC			SFT/BK	F	PK	----	----	----	0290	4	C	- 5	A		SETL	3200BC	1	RM.1B AREA 8-3
0325	-B	71		15		FLR.+ABOVE	NONE			SOFT	G	FPK	----	----	0333	----	4	C	- 5	A	1	SETL	3200BC	1	VA-1VC 8-3
3768	-A	75	8	12		UNDIF.FILL	??			??	F	PK	----	----	3769	3755	4	C	- 6			SETL	3200BC	1	MIXED 8-19
0517	BW	71	1	-6		MIXED FILL	OUT		??	MIXED	F	PK	----	----	----	0536	4	C	- 6	A		MONU	3200BC	1	AREA G 6-28
1310	CW	73		-7		UNSHAP.PIT	OUT		OP-N	SOFT	P	PK	----	----	----	----	4	C	- 6	A		SETL	3200BC	1	BEVEL-RIM BWLS
0278	-B	71		-4	-9	FLR.+ABOVE	IN	??		HARD	E	PK	----	----	----	----	4	C	1-			MONU	3200BC	1	E.OF RM.4 6-23
0309	BWCW	71		-7	-7	WALLS	ASSC			BRICK	E	PK	----	----	0468	----	4	C	1-			SETL	3200BC	1	AREA G 8-4
0468	BWCW	71		-9	-2	FLR.+ABOVE	OUT		OP-N	SFT/BK	G	PK	----	----	0466	0309	4	C	1-			SETL	3200BC	1	AREA G 8-7
0536	BW	71	1	-5		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	----	----	0517	0526	4	C	1-			MONU	3200BC	1	AREA G 6-27
0539	BW	71	2	-5B		UNDIF.FILL	ASSC			BRICK	G	PK	----	----	0545	----	4	C	1-			MONU	3200BC	1	CORNER 7-8
0296	-B	71	1	-1		ROOM FILL	IN	SPEC		SFT/BK	G	PK	----	0280	----	----	4	C	1-			MONU	3200BC	1	RM.6 WELL 6-16
0305	-B	71		11	12	ROOM FILL	IN	SPEC		SOFT	G	PK	----	0280	0295	----	4	C	1-			MONU	3200BC	1	RM.6 WELL 6-30
0301	-B	71	2	-2		PLATFORM	IN	SPEC		GEL	E	PK	----	0282	0302	----	4	C	1-			MONU	3200BC	1	R.4 ?STRG 6-19
0282	-B	71		-4	-6	PLATFORM	IN	SPEC		GEL	E	PK	----	0301	0279	----	4	C	1-			MONU	3200BC	1	R.4 ?STRG 6-19
0279	-B	71		-4	10	FLR.+ABOVE	IN	SPEC		??	E	PK	----	0302	0304	0282	4	C	1-			MONU	3200BC	1	R.3 ?STRG 6-24
0280	BM	71		4-5		ROOM FILL	IN	SPEC		SOFT	G	PK	----	0305	0330	----	4	C	1-			MONU	3200BC	1	R.6 WELL 6-22
0293	BM	71		-5		ROOM FILL	IN	SPEC		SOFT	G	PK	----	0305	0330	----	4	C	1-			MONU	3200BC	1	RM.6 WELL 6-23
0537	BW	71	1	-2		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	----	0399	0526	----	4	C	1-			MONU	3200BC	1	AREA G 6-17
0542	BW	71	2	-6	-2	FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	----	0399	0555	----	4	C	1-			MONU	3200BC	1	BUTTRESS 7-5
0549	BW	71		-7		FLR.+ABOVE	OUT		OP-N	SOFT	F	PK	----	0409	0468	0550	4	C	1-			MONU	3200BC	1	AREA G 7-22
0399	B-BW	71		-3		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	----	0542	0410	----	4	C	1-			MONU	3200BC	1	6-21 THRU 7-14
0545	BW	71	2	-6B		ROOM FILL	ASSC			BRICK	G	PK	----	0542	----	0539	4	C	1-			MONU	3200BC	1	CORNER 7-10
0525	BW	71	2	-6		FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	----	0543	----	----	4	C	1-			MONU	3200BC	1	AREA G 7-3,10
0550	BW	71		-6		IN FLOORS	OUT		OP-N	HARD	F	PK	----	0543	0549	----	4	C	1-			MONU	3200BC	1	AREA G 7-22
0551	BW	71		-6		IN FLOORS	OUT		OP-N	HARD	G	PK	----	0543	----	----	4	C	1-			MONU	3200BC	1	AREA G 7-24
0552	BWCW	71		-7	-2	FLR.+ABOVE	OUT		OP-N	SFT/BK	E	PK	----	0547	0555	----	4	C	1-			SETL	3200BC	1	AREA G 7-25
0556	BW	71		-7	-6	WALLS	ASSC			SFT/BK	E	PK	----	0547	0555	----	4	C	1-			SETL	3200BC	1	AREA G 7-28
0409	B-BW	71		-7		ROOM FILL	OUT		OP-N	SOFT	G	PK	----	0549	0468	0410	4	C	1-			MONU	3200BC	1	AREA G 7-25
0554	BW	71		-8	-2A	FLR.+ABOVE	ASSC			MIXED	F	PK	----	0549	0468	0543	4	C	1-			MONU	3200BC	1	AREA G 7-28
0410	B-BW	71		-6		IN FLOORS	OUT		OP-N	HARD	E	PK	----	0551	0409	0399	4	C	1-			MONU	3200BC	1	AREA G 7-24
0543	BW	71	2	-7		FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	----	0551	0554	----	4	C	1-			MONU	3200BC	1	AREA G 7-6,7
0547	BW	71		-7	-4	FLR.+ABOVE	OUT		OP-N	SFT/BK	E	PK	----	0552	0555	----	4	C	1-			SETL	3200BC	1	AREA G 7-27
0302	-B	71		-4	-8	FLR.+ABOVE	IN	SPEC		??	E	PK	0302	0279	0294	0301	4	C	1-			MONU	3200BC	1	R.4 ?STRG 6-21
0308	-B	71		-4	-8	FLR.+ABOVE	IN	SPEC		??	E	PK	0302	0279	0294	0301	4	C	1-			MONU	3200BC	1	R.4 ?STRG 8-2
0337	-BC-	71		28		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	0337	0399	----	----	4	C	1-			MONU	3200BC	1	AREA G 7-13
0342	-BC-	71		28		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	0337	0399	----	----	4	C	1-			MONU	3200BC	1	AREA G 7-14
0355	-BC-	71		28		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	0337	0399	----	----	4	C	1-			MONU	3200BC	1	AREA G 7-13
0377	-BC-	71		28		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	0337	0399	----	----	4	C	1-			MONU	3200BC	1	AREA G 7-12
0360	-BC-	71		28	-1	SHAPED PIT	OUT		OP-N	??	E	PK	0360	0337	----	----	4	C	1-			MONU	3200BC	1	FROM 28 7-13
0362	-BC-	71		28	-1	SHAPED PIT	OUT		OP-N	??	E	PK	0360	0337	----	----	4	C	1-			MONU	3200BC	1	FROM 28 7-14
0526	BW	71	1	-4		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	0526	0399	0536	0537	4	C	1-			MONU	3200BC	1	AREA G 6-27
0544	BW	71	1	-4		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	0526	0399	0536	0537	4	C	1-			MONU	3200BC	1	AR.G 6-29,7-1
0534	BW	71	2	-6	-3	FLR.+ABOVE	OUT		OP-N	HARD	G	PK	0534	----	----	----	4	C	1-			MONU	3200BC	1	DRAIN AREA 7-5
0553	BW	71	2	-6	-3	FLR.+ABOVE	OUT		OP-N	HARD	G	PK	0534	----	----	----	4	C	1-			MONU	3200BC	1	DRAIN 7-29
3706	-A	75	7	11		ROOM FILL	ASSC			SOFT	G	PK	3706	----	3704	----	4	C	1-			MONU	3200BC	1	UPPER FILL 8-5
3707	-A	75	7	11		ROOM FILL	ASSC			SOFT	G	DRY	3706	----	3704	----	4	C	1-			MONU	3200BC	1	UPPER FILL 8-5
3715	-A	75		11		ROOM FILL	ASSC			SOFT	G	PK	3706	----	3759	----	4	C	1-			MONU	3200BC	1	W.SIDE 8-7
3718	-A	75		11		ROOM FILL	ASSC			SOFT	G	PK	3706	----	3759	----	4	C	1-			MONU	3200BC	1	UPPER FILL 8-7
3724	-A	75		11		ROOM FILL	ASSC			SOFT	G	DRY	3706	----	3734	----	4	C	1-			MONU	3200BC	1	UPPER FILL 8-9
3733	-A	75		11		ROOM FILL	ASSC			SOFT	G	PK	3706	----	3734	----	4	C	1-			MONU	3200BC	1	UPPR.FILL 8-10
3767	-A	75		11		ROOM FILL	ASSC			SOFT	G	DRY	3706	----	----	----	4	C	1-			MONU	3200BC	1	MIXD.FILL 8-17
0306	-B	71		-8A		LEVELLING	ASSC			BRICK	E	PK	----	----	----	----	4	C	1- 4	B	6	MONU	3200BC	1	AREA 2 8-2
0291	BM	71		-2	-1	ROOM FILL	IN	RM1		BRICK	G	PK	----	0293	0290	0283	4	C	1- 4	B	6	MONU	3200BC	1	RM.1B 6-21
0283	BM	71		-1	-1	ROOM FILL	IN	RM1		SFT/BK	G	PK	0283	----	0291	----	4	C	1- 4	B	6	MONU	3200BC	1	RM.1B 6-20
0297	BM	71		-1	-1	ROOM FILL	IN	RM1		SFT/BK	G	PK	0283	----	0291	----	4	C	1- 4	B	6	MONU	3200BC	1	RM.1B 6-21
0289	-B	70		20		FLR.+ABOVE	IN	RM3		??	G	PK	----	----	----	----	4	C	2-			MONU	3200BC	1	ROOM#5 6-17-71
0290	BM	71		-3	-5	HEARTH	IN	RM1		BURNED	E	PK	----	----	0307	0291	4	C	2-			MONU	3200BC	1	RM.1B 7-1
0295	-B	71		13		IM.AB.FLR.	IN	SPEC		SOFT	E	PK	----	----	0327	0305	4	C	2-			MONU	3200BC	1	RM.6 WELL 7-1
0327	-B	71		13	3-4	IN FLOORS	IN	SPEC		BURNED	G	PK	----	----	0325	0295	4	C	2-			MONU	3200BC	1	RM.6 WELL 8-3
1302	CW	73	1	-3	-1	IN FLOORS	OUT		OP-N	GEL	P	PK	----	----	1305	1303	4	C	2-			MONU	3200BC	1	UNSEALED 6-21
1305	CW	73		-1		ROOM FILL	OUT		OP-N	??	G	PK	----	----	1304	1302	4	C	2-			MONU	3200BC	1	6-24
1309	CW	73	1	-5	-4	WALLS	ASSC			BRICK	P	PK	----	----	----	1305	4	C	2-			MONU	3200BC	1	UNSEALED 6-26
1340	CW	73		-2	-2	WALLS	ASSC			BRICK	G	FPK	----	----	----	----	4	C	2-			MONU	3200BC	1	IN WALL 7-31
1364	BW	73	2	-1	-1	WALLS	ASSC			BRICK	G	FPK	----	----	----	----	4	C	2-			MONU	3200BC	1	IN WALL 8-12
3734	-A	75		11	-6	FLR.+ABOVE	IN	RM1		??	E	PK	----	----	3751	3706	4	C	2-			MONU	3200BC	1	RM#D UPR 8-10
3742	-A	75		11	-7	ROOM FILL	IN	RM2		??	G	PK	----	----	3758	3706	4	C	2-			MONU	3200BC	1	RM#E 8-11
3751	-A	75		11	6A	IM.AB.FLR.	IN	RM1		??	E	PK	----	----	----	3734	4	C	2-			MONU	3200BC	1	RM#D LWR 8-13
3758	-A	75		11	-7A	IM.AB.FLR.	IN	RM2		ASHY	E	PK	----	----	3770	3742	4	C	2-			MONU	3200BC	1	RM#E UPR 8-14
3770	-A	75		11	7B	UNDIF.FILL	IN	RM2		??	E	PK	----	----	----	3758	4	C	2-			MONU	3200BC	1	RM#E LWR. 8-16
0294	-B	71		-5	-1	FLR.+ABOVE	IN	SPEC		??	E	PK	----	0304	----	0302	4	C	2-			MONU	3200BC	1	R.4 ?STRG 6-21
0330	BM	71		-6	-2	IM.AB.FLR.	IN	SPEC		SOFT	G	PK	----	0327	0325	0293	4	C	2-			MONU	3200BC	1	RM.6 WELL 8-3
0555	BWCW	71		10		IN FLOORS	OUT		OP-F	GEL	G	PK	----	0466	----	0468	4	C	2-			MONU	3200BC	1	AREA G 8-8,9
1307	CW	73		-3		IN FLOORS	OUT		OP-N	SOFT	G	PK	----	1304	----	1305	4	C	2-			MONU	3200BC	1	6-24
1304	CW	73	1	-5		IN FLOORS	OUT		OP-N	GEL	G	PK	----	1307	----	1305	4	C	2-			MONU	3200BC	1	6-23
3757	-A	75		11	-9	DRAIN	OUT		OP-N	??	E	PK	----	3755	----	3706	4	C	2-			MONU	3200BC	1	DRAIN FILL8-14
0466	BWCW	71		11		FLR.+ABOVE	OUT		OP-F	GEL	E	PK	0466	0555	----	0468	4	C	2-			SETL	3200BC	1	AREA G 8-12
0467	BWCW	71		11		FLR.+ABOVE	OUT		OP-F	GEL	E	PK	0466	0555	----	0468	4	C	2-			SETL	3200BC	1	AREA G 8-14
0469	BWCW	71		11		FLR.+ABOVE	OUT		OP-F	GEL	E	PK	0466	0555	----	0468	4	C	2-			SETL	3200BC	1	AREA G 8-11
3704	-A	75	7	11	-2	FLR.+ABOVE	IN	RM1		??	E	DRY	3704	----	3721	3706	4	C	2-			MONU	3200BC	1	ROOM#1 UPR 8-6
3711	-A	75	7	11	-2	FLR.+ABOVE	IN	RM1		??	E	PK	3704	----	3721	3706	4	C	2-			MONU	3200BC	1	ROOM#1 UPR 8-6
3732	-A	75		11	-2	FLR.+ABOVE	IN	RM1		??	E	PK	3704	----	3721	3706	4	C	2-			MONU	3200BC	1	RM#1 UPR 8-10
3709	-A	75	7	11	2B	IM.AB.FLR.	IN	RM1		??	E	DRY	3709	----	----	3721	4	C	2-			MONU	3200BC	1	ROOM#1 LWR 8-6
3710	-A	73	7	11	2B	IM.AB.FLR.	IN	RM1		??	E	PK	3709	----	----	3721	4	C	2-			MONU	3200BC	1	ROOM#1 LWR 8-6
3722	-A	75		11	2B	IM.AB.FLR.	IN	RM1		??	E	PK	3709	----	----	3721	4	C	2-			MONU	3200BC	1	ROOM#1 LWR 8-9
3728	-A	75		11	2B	IM.AB.FLR.	IN	RM1		??	E	PK	3709	----	----	3721	4	C	2-			MONU	3200BC	1	RM#1 LWR 8-10
3743	-A	75		11	2B	IM.AB.FLR.	IN	RM1		??	E	PK	3709	----	----	3721	4	C	2-			MONU	3200BC	1	RM#1 LWR 8-11
3712	-A	75	7	11	-3	FLR.+ABOVE	OUT		CORT	??	E	PK	3712	----	3746	3706	4	C	2-			MONU	3200BC	1	CRT#C UPR 8-6
3713	-A	75	7	11	-3	FLR.+ABOVE	OUT		CORT	??	E	DRY	3712	----	3746	3706	4	C	2-			MONU	3200BC	1	CRT#C UPR 8-6
3719	-A	75		11	-3	FLR.+ABOVE	OUT		CORT	??	E	PK	3712	----	3746	3706	4	C	2-			MONU	3200BC	1	CRT#C UPR 8-7
3737	-A	75		11	-3	FLR.+ABOVE	OUT		CORT	??	E	DRY	3712	----	3746	3706	4	C	2-			MONU	3200BC	1	CRT#C UPR 8-11
3738	-A	75		11	-3	FLR.+ABOVE	OUT		CORT	??	E	PK	3712	----	3746	3706	4	C	2-			MONU	3200BC	1	CRT#C UPR 8-11
3745	-A	75		11	-3	FLR.+ABOVE	OUT		CORT	??	E	PK	3712	----	3746	3706	4	C	2-			MONU	3200BC	1	CRT#C UPR 8-12
3749	-A	75		11	-3	FLR.+ABOVE	OUT		CORT	??	E	DRY	3712	----	3746	3706	4	C	2-			MONU	3200BC	1	CRT#C UPR 8-12

LOC	SQR	YR	TT	STR	FEA	FLR/FL/FTR	IN/X	ICX	ECX	FILL	Q	REC	SAME	CTMN	EARL	LATE	PERIOD	--PERIOD	SITE	DATE	C	COMMENT
3721	-A	75		11	2A	IM.AB.FLR.	IN	RM1		??	E	PK	3721	----	3709	3704	4 C	2-	MONU	3200BC	1	ROOM#1 MID 8-9
3736	-A	75		11	2A	IM.AB.FLR.	IN	RM1		??	E	PK	3721	----	3709	3704	4 C	2-	MONU	3200BC	1	RM#1 MID 8-10
3746	-A	75		11	3A	IM.AB.FLR.	OUT		CORT	??	E	PK	3746	----	----	3712	4 C	2-	MONU	3200BC	1	CRT#C LWR 8-12
3750	-A	75		11	3A	IM.AB.FLR.	?IN		CORT	??	E	PK	3746	----	----	3712	4 C	2-	MONU	3200BC	1	CRT#C LWR 8-13
3752	-A	75		11	3A	IM.AB.FLR.	OUT		CORT	??	E	DRY	3746	----	----	3712	4 C	2-	MONU	3200BC	1	CRT#C LWR 8-13
3753	-A	75		11	3A	IM.AB.FLR.	OUT		CORT	??	E	DRY	3746	----	----	3712	4 C	2-	MONU	3200BC	1	CRT#C LWR 8-13
3756	-A	75		11	3A	IM.AB.FLR.	OUT		CORT	??	E	DRY	3746	----	----	3712	4 C	2-	MONU	3200BC	1	CRT#C LWR 8-14
3761	-A	75		11	3A	IM.AB.FLR.	OUT		CORT	??	E	PK	3746	----	----	3712	4 C	2-	MONU	3200BC	1	CRT#C LWR 8-14
3755	-A	75		11	-8	FLR.+ABOVE	OUT		OP-N	??	G	DRY	3755	----	----	3706	4 C	2-	MONU	3200BC	1	AREA#A 8-13
3765	-A	75		11	-8	FLR.+ABOVE	OUT		OP-N	??	G	DRY	3755	----	----	3706	4 C	2-	MONU	3200BC	1	AREA#A 8-16
3766	-A	75		11	-8	FLR.+ABOVE	OUT		OP-N	??	G	PK	3755	----	----	3706	4 C	2-	MONU	3200BC	1	AREA#A 8-16
3759	-A	75		11	-5	FLR.+ABOVE	OUT		OP-N	??	G	PK	3759	----	----	3706	4 C	2-	MONU	3200BC	1	W.SIDE#B 8-14
3762	-A	75		11	-5	FLR.+ABOVE	OUT		OP-N	??	G	PK	3759	----	----	3706	4 C	2-	MONU	3200BC	1	W.SIDE#B 8-16
3763	-A	75		11	-5	FLR.+ABOVE	OUT		OP-N	??	G	DRY	3759	----	----	3706	4 C	2-	MONU	3200BC	1	W.SIDE#B 8-14
3764	-A	75		11	-5	FLR.+ABOVE	OUT		OP-N	??.	G	DRY	3759	----	----	3706	4 C	2-	MONU	3200BC	1	W.SIDE#B 8-16
0286	-B	71		6-9		ROOM FILL	ASSC			??	F	PK	----	----	----	----	4 C	2- 4 C 1	MONU	3200BC	1	MIXED 6,8,9
1363	BW	73	2	-2		UNDIF.FILL	NONE			??	F	PK	----	----	----	----	5 A	- 5 B	DOMS	3500BC	1	MXD.VA-B 8-13
0726	-C	69	2	-5	-8	UNDIF.FILL	NONE			RUBBLE	F	PK	0726	----	----	----	5 A	- 5 C	SETL	3500BC	1	MIXD VC-A 7-9
0736	-C	69		-5	-8	UNDIF.FILL	NONE			RUBBLE	F	PK	0726	----	----	----	5 A	- 5 C	SETL	3500BC	1	MIXD VC-A ?
0752	-C	69	2	-5	-8	UNDIF.FILL	NONE			RUBBLE	F	PK	0726	----	----	----	5 A	- 5 C	SETL	3500BC	1	MIXD VC-A 7-12
0863	-C	69	2	-5	-8	UNDIF.FILL	NONE			RUBBLE	F	PK	0726	----	----	----	5 A	- 5	SETL	3500BC	1	MIXD VC-A 7-10
0864	-C	69		-5	-8	UNDIF.FILL	NONE			RUBBLE	P	PK	0726	----	----	----	5 A	- 5	SETL	3500BC	1	MIXD VC-A 8-4
0310	-B	71		21		UNDIF.FILL	NONE			SOFT	G	FPK	----	----	0323	0331	5 A	1-	SETL	3500BC	1	COURT 16 8-?
0329	-B	71		18	-1	ON FLOOR	NONE			HARD	E	FPK	----	----	0332	0335	5 A	1-	SETL	3500BC	1	COURT 16 8-4
0331	-B	71		20		UNDIF.FILL	NONE			SOFT	E	FPK	----	----	0310	0329	5 A	1-	SETL	3500BC	1	COURT 16 8-4
0332	-B	71		19		IN FLOORS	NONE			SOFT	G	FPK	----	----	0323	0329	5 A	1-	SETL	3500BC	1	B.71.19+21 8-4
1326	-B	73		-3	-4	UNDIF.FILL	NONE			RUBBLE	G	FPK	----	----	1337	1320	5 A	1-	SETL	3500BC	1	RUBBLE 7-17
1337	-B	73		-3	-5	FLR.+ABOVE	ASSC			??	G	FPK	----	----	1323	1326	5 A	1-	SETL	3500BC	1	BETW.WALLS7-28
0333	-B	71		18		IM.AB.FLR.	NONE			HARD	E	FPK	0335	----	0329	0325	5 A	1-	SETL	3500BC	1	COURT 16 8-4
0335	-B	71		17		IM.AB.FLR.	NONE			HARD	E	FPK	0335	----	0329	0325	5 A	1-	SETL	3500BC	1	COURT 16 8-4
1314	-B	73		-2		FLR.+ABOVE	NONE			ASHY	G	FPK	1314	0325	1320	----	5 A	1-	SETL	3500BC	1	COURT 16 7-10
1315	-B	73		-2		FLR.+ABOVE	NONE			ASHY	G	FPK	1314	0325	1320	----	5 A	1-	SETL	3500BC	1	COURT 16 7-11
1316	-B	73		-2		FLR.+ABOVE	NONE			ASHY	G	FPK	1314	0325	1320	----	5 A	1-	SETL	3500BC	1	COURT 16 7-12
1317	-B	73		-2		FLR.+ABOVE	NONE			ASHY	G	FPK	1314	0325	1320	----	5 A	1-	SETL	3500BC	1	COURT 16 7-14
1318	-B	73		-2		FLR.+ABOVE	NONE			ASHY	G	FPK	1314	0325	1320	----	5 A	1-	SETL	3500BC	1	COURT 16 7-15
1320	-B	73		-3		FLR.+ABOVE	NONE			ASHY	G	FPK	1320	----	1326	1314	5 A	1-	SETL	3500BC	1	COURT 16 7-17
1321	-B	73		-3		FLR.+ABOVE	NONE			ASHY	G	FPK	1320	----	1326	1314	5 A	1-	SETL	3500BC	1	COURT 16 7-16
1335	-B	73		-3		FLR.+ABOVE	NONE			ASHY	G	FPK	1320	----	1326	1314	5 A	1-	SETL	3500BC	1	COURT 16 7-25
1901	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER 6-24
1902	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER 6-23
1903	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER 6-24
1904	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER 6-24
1905	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER 6-27
1906	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER 6-26
1907	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER 6-25
1908	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER 6-28
1909	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER 6-28
0702	-C	69		-1		UNDIF.FILL	NONE			BRICK	F	PK	0702	0716	0743	----	5 A	1- 5 B	SETL	3500BC	1	MXD.VA-B 6-19
0733	-C	69		-1		UNDIF.FILL	NONE			BRICK	F	PK	0702	0716	0743	----	5 A	1- 5 B	SETL	3500BC	1	MXD.VA-B 6-24
0742	-C	69		-1		UNDIF.FILL	NONE			BRICK	F	PK	0702	0716	0743	----	5 A	1- 5 B	SETL	3500BC	1	MXD.VA-B 6-21
0777	-C	69		-1		UNDIF.FILL	NONE			BRICK	F	PK	0702	0716	0743	----	5 A	1- 5 B	SETL	3500BC	1	MXD.VA-B 6-23
0716	-C	69	1	-1		UNDIF.FILL	NONE			BRICK	F	PK	0716	0702	0743	----	5 A	1- 5 B	SETL	3500BC	1	MXD.VA-B 6-8
0774	-C	69	1	-1		UNDIF.FILL	NONE			BRICK	F	PK	0716	0702	0743	----	5 A	1- 5 B	SETL	3500BC	1	MXD.VA-B 6-10
0708	-C	69	1	-1		UNDIF.FILL	NONE			BRICK	F	PK	0716	0702	0743	----	5 A	1- 5 B	SETL	3500BC	1	MXD.VA-B 6-9
0313	-B	71		22	-1	IN FLOORS	NONE			HARD	E	FPK	----	1322	0316	0323	5 A	2-	SETL	3500BC	1	COURT 5 8-8
0323	-B	71		22		FLR.+ABOVE	NONE			SOFT	E	FPK	----	1323	0313	0310	5 A	2-	SETL	3500BC	1	COURT 5 8-7
1322	-B	73		-4	-2	IN FLOORS	NONE			WATER	G	FPK	1322	0313	1341	1323	5 A	2-	SETL	3500BC	1	COURT 5 7-19
1332	-B	73		-4	-2	IN FLOORS	NONE			WATER	G	FPK	1322	0313	1341	1323	5 A	2-	SETL	3500BC	1	COURT 5 7-23
1323	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	6 A	2-	SETL	3500BC	1	COURT 5 7-19
1324	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A	2-	SETL	3500BC	1	COURT 5 7-25
1325	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A	2-	SETL	3500BC	1	COURT 5 7-18
1327	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A	2-	SETL	3500BC	1	COURT 5 7-21
1329	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A	2-	SETL	3500BC	1	COURT 5 7-22
1331	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A	2-	SETL	3500BC	1	COURT 5 7-23
1333	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A	2-	SETL	3500BC	1	COURT 5 7-24
1334	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A	2-	SETL	3500BC	1	COURT 5 7-25
1336	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A	2-	SETL	3500BC	1	COURT 5 7-28
1338	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A	2-	SETL	3500BC	1	COURT 5 7-29
1339	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A	2-	SETL	3500BC	1	COURT 5 7-30
0312	-B	71		27	-2	IN FLOORS	OUT		CORT	??	G	FPK	----	----	0320	0319	5 B	-	DOMS	3800BC	1	COURT 16 8-10
0315	-B	71		27		IN FLOORS	OUT		CORT	SOFT	G	FPK	----	----	0319	0317	5 B	-	DOMS	3800BC	1	COURT 16 8-9
0317	-B	71		26		IN FLOORS	OUT		CORT	HARD	G	FPK	----	----	0315	0318	5 B	-	DOMS	3800BC	1	COURT 16 8-9
0318	-B	71		25		IN FLOORS	OUT		CORT	HARD	G	FPK	----	----	0317	0321	5 B	-	DOMS	3800BC	1	COURT 16 8-9
0319	-B	71		27	-1	IN FLOORS	OUT		CORT	HARD	E	FPK	----	----	0312	0315	5 B	-	DOMS	3800BC	1	COURT 16 8-10
0710	-C	69	2	-5	-7	WALLS	ASSC			BRICK	F	FPK	----	----	0807	1342	5 B	-	DOMS	3800BC	1	WALL 5 7-8
1348	-B	73		-6	-2	IN FLOORS	OUT		CORT	WATER	G	FPK	----	----	1356	1342	5 B	-	DOMS	3800BC	1	COURT 16 8-4,5
1354	-B	73		-5	-1	IM.AB.FLR.	NONE			BURNED	E	FPK	----	----	1342	1341	5 B	-	SETL	3800BC	1	UP.16 SURF.8-9
1358	-B	73		-5	-4	UNDIF.FILL	NONE			HARD	G	FPK	----	----	1354	1341	5 B	-	SETL	3800BC	1	NE CORNER 8-11
1367	-B	73	1	-1	-1	IN FLOORS	NONE			WATER	G	FPK	----	----	1370	1368	5 B	-	SETL	3800BC	1	8-16
1368	-B	73	1	-1		UNDIF.FILL	NONE			SOFT	G	FPK	----	----	1367	1356	5 B	-	SETL	3800BC	1	8-15
1362	-B	73		-5	-2	FLR.+ABOVE	IN	TOMB		ASHY	G	FPK	----	1341	1354	1322	5 B	-	STRC	3800BC	1	ROOM 11 8-12
0316	-B	71		23		IN FLOORS	NONE			SFT/BK	G	FPK	0316	1341	0318	0313	5 B	-	SETL	3800BC	1	UP.VB DEP.8-7
0321	-B	71		24		IN FLOORS	NONE			SFT/BK	G	FPK	0316	1341	0318	0313	5 B	-	SETL	3800BC	1	UP.VB DEP.8-8
0735	-C	69		-1	-7	FLR.+ABOVE	IN	RM2		BRICK	G	FPK	0735	0743	1306	1342	5 B	-	DOMS	3800BC	1	ROOM 2 7-5
0741	-C	69		-1	-7	FLR.+ABOVE	IN	RM2		BRICK	G	FPK	0735	0743	1306	1342	5 B	-	DOMS	3800BC	1	ROOM 2 6-18
0809	-C	69		-1	-7	FLR.+ABOVE	IN	RM2		BRICK	G	FPK	0735	0743	1306	1342	5 B	-	DOMS	3800BC	1	ROOM 2 6-22
0834	-C	69		-1	-7	FLR.+ABOVE	IN	RM2		BRICK	G	FPK	0735	0743	1306	1342	5 B	-	DOMS	3800BC	1	ROOM 2 6-14
0743	-C	69		-1	2-3	FLR.+ABOVE	IN	RM1		BRICK	G	FPK	0743	0735	1306	1342	5 B	-	DOMS	3800BC	1	ROOM 1 6-21
0772	-C	69		-1	2-3	FLR.+ABOVE	IN	RM1		BRICK	G	FPK	0743	0735	1306	1342	5 B	-	DOMS	3800BC	1	ROOM 1 6-28
1341	-B	73		-5		IN FLOORS	NONE			LAMIN.	G	FPK	1341	0316	1354	1322	5 B	-	SETL	3800BC	1	UP.VB DEP.7-31
1343	-B	73		-5		IN FLOORS	NONE			LAMIN.	G	FPK	1341	0316	1354	1322	5 B	-	SETL	3800BC	1	UP.VB DEP. 8-1
1344	-B	73		-5		IN FLOORS	NONE			LAMIN.	G	FPK	1341	0316	1354	1322	5 B	-	SETL	3800BC	1	UP.VB DEP. 8-2
1352	-B	73		-5		IN FLOORS	NONE			LAMIN.	G	FPK	1341	0316	1354	1322	5 B	-	SETL	3800BC	1	UP.VB DEP. 8-8
1342	-B	73		-6		IN FLOORS	OUT		CORT	WATER	G	FPK	1342	1355	1348	1354	5 B	-	DOMS	3800BC	1	COURT 16 8-1
1345	-B	73		-6		IN FLOORS	OUT		CORT	WATER	G	FPK	1342	1355	1348	1354	5 B	-	DOMS	3800BC	1	COURT 16 8-2
1347	-B	73		-6		IN FLOORS	OUT		CORT	WATER	G	FPK	1342	1355	1348	1354	5 B	-	DOMS	3800BC	1	COURT 16 8-4
1351	-B	73		-6		IN FLOORS	OUT		CORT	WATER	G	FPK	1342	1355	1348	1354	5 B	-	DOMS	3800BC	1	COURT 16 8-6
1353	-B	73		-6		IN FLOORS	OUT		CORT	WATER	G	FPK	1342	1355	1348	1354	5 B	-	DOMS	3800BC	1	COURT 16 8-7
1361	-B	73		-6		IN FLOORS	OUT		CORT	WATER	G	FPK	1342	1355	1348	1354	5 B	-	DOMS	3800BC	1	COURT 16 8-13
1365	-B	73		-6		IN FLOORS	OUT		CORT	WATER	G	FPK	1342	1355	1348	1354	5 B	-	DOMS	3800BC	1	COURT 16 8-15
1355	-B	73		-6	-3	DEPRESSION	NONE			ORGANC	G	FPK	1355	1342	----	1354	5 B	-	DOMS	3800BC	1	DEPRES.15 8-9
1357	-B	73		-6	-3	DEPRESSION	NONE			ORGANC	G	FPK	1355	1342	----	1354	5 B	-	DOMS	3800BC	1	DEPRES.15 8-12

LOC	SQR	YR	TT	STR	FEA	FLR/FL/FTR	IN/X	ICX	ECX	FILL	Q	REC	SAME	CTHN	EARL	LATE	PERIOD	--PERIOD		SITE	DATE	C	COMMENT
1359	-B	73		-6	-3	DEPRESSION	NONE			ORGANC	G	FPK	1355	1342	----	1354	5 B	-		DOMS	3800BC	1	DEPRES.15 8-11
1366	-B	73		-6	-3	DEPRESSION	NONE			ORGANC	G	FPK	1355	1342	----	1354	5 B	-		DOMS	3800BC	1	DEPRES.15 8-14
1356	-B	73		-6	-4	IN FLOORS	OUT		CORT	WATER	G	FPK	1356	----	1368	1348	5 B	-		DOMS	3800BC	1	COURT 16 8-12
1360	-B	73		-6	-4	IN FLOORS	OUT		CORT	WATER	G	FPK	1356	----	1368	1348	5 B	-		DOMS	3800BC	1	8-13
0320	-B	71		27	3-5	IN FLOORS	NONE			HARD	G	PK	----	----	0311	0312	5 B	- 5 C		SETL	3800BC	1	8-10
0311	-B	71		28		UNDIF.FILL	NONE			SFT/BK	E	PK	----	----	0314	0320	5 C	-		SETL	4000BC	1	8-11
0322	-B	71		29	-1	FLR.+ABOVE	NONE			BRICK	G	PK	----	----	1369	0314	5 C	-		SETL	4000BC	1	8-12
0800	-D	69		-2		FOUNDATION	ASSC			HARD	G	PK	----	----	----	----	5 C	-		DOMS	4000BC	1	FDTN TRCH 6-17
1910	CDE-	73		-1	5-6	WALLS	ASSC			BRICK	F	PK	----	----	----	----	5 C	-		DOMS	4000BC	1	WALL 6-30
0759	-C	70		-5	-2	FLR.+ABOVE	IN	RM1		BRICK	G	PK	----	0700	0698	0740	5 C	-		DOMS	4000BC	1	SOUTH RMS 6-23
0768	-C	69		-7	11	FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	----	0700	0698	0740	5 C	-		DOMS	4000BC	1	OUTSIDE 7-21
0769	-C	69		-7	-4	FLR.+ABOVE	IN	RM1		BRICK	G	PK	----	0700	0698	0740	5 C	-		DOMS	4000BC	1	ROOM 14 7-31
0801	-C	69		-7	-2	FLR.+ABOVE	IN	RM1		BRICK	G	PK	----	0700	0698	0740	5 C	-		DOMS	4000BC	1	ROOM 3 7-30
0808	-C	69		-7	-7	FLR.+ABOVE	IN	RM3		BRICK	G	PK	----	0700	0698	0740	5 C	-		DOMS	4000BC	1	ROOM 12 7-31
0811	-C	69		-7	17	FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	----	0700	0698	0740	5 C	-		DOMS	4000BC	1	OUTSIDE 7-27
0872	-C	69		-7	14	IM.AB.FLR.	IN	RM1		BRICK	E	PK	----	0700	0698	0740	5 C	-		DOMS	4000BC	1	ROOM 6 7-30
0874	-C	69		-7	-3	FLR.+ABOVE	IN	RM1		BRICK	G	PK	----	0700	0698	0740	5 C	-		DOMS	4000BC	1	ROOM 4 7-31
1912	CDE-	73		-1	-8	FLR.+ABOVE	IN	RM1		BRICK	F	PK	----	0700	1917	----	5 C	-		DOMS	4000BC	1	ROOM 16 7-3,4
1913	CDE-	73		-1	-9	FLR.+ABOVE	OUT		OP-N	BRICK	F	PK	----	0700	1917	----	5 C	-		DOMS	4000BC	1	OUTSIDE 7-3,5
0807	-C	69		-5		PLATFORM	NONE			BRICK	G	PK	----	0770	0740	0735	5 C	-		SETL	4000BC	1	6-29
1306	CW	73	1	-6		PLATFORM	NONE			BRICK	G	PK	----	0770	0740	0735	5 C	-		SETL	4000BC	1	PAVNG.6-24,26
1308	CW	73		-5		PLATFORM	NONE			BRICK	G	PK	----	0770	0740	0735	5 C	-		SETL	4000BC	1	PAVING 6-25
0314	-B	71		29		UNDIF.FILL	NONE			SFT/BK	E	PK	----	1370	0322	0311	5 C	-		SETL	4000BC	1	8-10
0700	-C	69		-7	13	FLR.+ABOVE	IN	RM1		BRICK	G	PK	----	1912	0698	0740	5 C	-		DOMS	4000BC	1	ROOM 10 7-31
0740	-C	69	2	-1		ROOM FILL	ASSC			BRICK	G	PK	0740	----	0700	0770	5 C	-		DOMS	4000BC	1	7-13
0760	-C	69	2	-1		ROOM FILL	ASSC			BRICK	G	PK	0740	----	0700	0770	5 C	-		DOMS	4000BC	1	7-12
0755	-C	69	1	-3		PLATFORM	NONE			BRICK	G	PK	0770	0807	0740	0735	5 C	-		SETL	4000BC	1	PAVING 6-12
0770	-C	69		-3		PLATFORM	NONE			BRICK	G	PK	0770	0807	0740	0735	5 C	-		SETL	4000BC	1	PAVING 7-24
0791	-C	69		-3		PLATFORM	NONE			BRICK	G	PK	0770	0807	0740	0735	5 C	-		SETL	4000BC	1	PAVING 7-14
0857	-C	69		-3		PLATFORM	NONE			BRICK	G	PK	0770	0807	0740	0735	5 C	-		SETL	4000BC	1	PAVING 8-4
0756	-C	69		-7	10	FLR.+ABOVE	IN	RM1		BRICK	G	PK	0844	0700	0698	0740	5 C	-		DOMS	4000BC	1	ROOM 1 7-21
0758	-C	69		-7	10	FLR.+ABOVE	IN	RM1		BRICK	G	PK	0844	0700	0698	0740	5 C	-		DOMS	4000BC	1	ROOM 1 7-22
0844	-C	69		-7	-9	FLR.+ABOVE	IN	RM1		BRICK	G	PK	0844	0700	0698	0740	5 C	-		DOMS	4000BC	1	ROOM 1 7-22
0873	-C	69		-7	12	HEARTH	IN	RM1		BURNED	E	FPK	0844	0700	0698	0740	5 C	-		DOMS	4000BC	1	HEARTH A 7-23
1369	-B	73	1	-3		FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	1369	----	----	1370	5 C	-		DOMS	4000BC	1	WALL FALL 8-16
1371	-B	73	1	-3		FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	1369	----	----	1370	5 C	-		DOMS	4000BC	1	WALL FALL 8-18
1370	-B	73	1	-2		UNDIF.FILL	NONE			ASHY	G	PK	1370	0314	1369	0770	5 C	-		SETL	4000BC	1	8-16
1372	-B	73	1	-2		UNDIF.FILL	NONE			ASHY	G	PK	1370	0314	1369	0770	5 C	-		SETL	4000BC	1	8-18
0859	-D	69		2-3		UNDIF.FILL	NONE			??	F	PK	----	----	----	----	5 C	- 6 A		SETL	4000BC	1	6-18
0712	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5 C	- 6 B	1	SETL	4000BC	1	MIXED 7-17
0715	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5 C	- 6 B	1	SETL	4000BC	1	MIXED 7-24
0722	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5 C	- 6 B	1	SETL	4000BC	1	MIXED 8-2
0761	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5 C	- 6 B	1	SETL	4000BC	1	MIXED 7-16
0776	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5 C	- 6 B	1	SETL	4000BC	1	MIXED 7-26
0782	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5 C	- 6 B	1	SETL	4000BC	1	MIXED 7-30
0789	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5 C	- 6 B	1	SETL	4000BC	1	MIXED 7-27
0797	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5 C	- 6 B	1	SETL	4000BC	1	MIXED 7-29
0799	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5 C	- 6 B	1	SETL	4000BC	1	MIXED 8-3
0819	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5 C	- 6 B	1	SETL	4000BC	1	MIXED 7-28
0846	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5 C	- 6 B	1	SETL	4000BC	1	MIXED 7-15
0861	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5 C	- 6 B	1	SETL	4000BC	1	MIXED 8-10
3769	-A	75	8	13		PLATFORM	??			BRICK	G	PK	----	----	3771	3768	6	-		SETL	4500BC	1	BV-RM.BWL 8-19
3771	-A	75	8	14		PLATFORM	??			BRICK	E	PK	----	----	3772	3769	6	-		SETL	4500BC	1	BV-RM.BWL 8-19
3772	-A	75	8	15		UNDIF.FILL	??			SFT/BK	G	PK	----	----	----	3771	6	-		SETL	4500BC	1	BV-RM.BWL 8-19
0724	-D	69		-3		UNDIF.FILL	NONE			??	G	PK	----	----	----	0699	6 A	-		SETL	4500BC	1	UNDER VC 6-18
0773	-C	69		-1	9A	LEVELLING	ASSC			RUBBLE	G	PK	----	----	----	0714	6 A	-		SETL	4500BC	1	PROB.CONTXT8-7
0812	-C	69		-4		WALLS	ASSC			BRICK	F	PK	----	----	----	0714	6 A	-		SETL	4500BC	1	RET.WALLS 6-28
1928	CDE-	73		-2	11	WALLS	ASSC			BRICK	F	PK	----	----	----	1915	6 A	-		SETL	4500BC	1	WLS.17+18 7-21
1917	CDE-	73		-2		LEVELLING	NONE			RUBBLE	G	PK	----	0698	1915	----	6 A	-		SETL	4500BC	1	UNDER VC 7-9
1346	CW	73	3			LEVELLING	ASSC			RUBBLE	E	PK	----	0714	----	----	6 A	-		SETL	4500BC	1	RUBBLE 4 8-4
1350	CW	73	3	-1		LEVELLING	ASSC			RUBBLE	E	PK	----	0714	----	----	6 A	-		SETL	4500BC	1	RUBBLE 4 8-5
0718	-D	69		-3	-3	LEVELLING	ASSC			RUBBLE	E	PK	----	0729	----	0699	6 A	-		SETL	4500BC	1	RUBBLE 26 6-21
0709	-C	69	1	-2	-4	LEVELLING	ASSC			RUBBLE	E	PK	----	0796	----	----	6 A	-		SETL	4500BC	1	RUBBLE 4 6-12
0698	-C	69	3	-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0698	0699	0729	----	6 A	-		SETL	4500BC	1	UNDER VC 8-14
0848	-C	69	3	-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0698	0699	0729	----	6 A	-		SETL	4500BC	1	UNDER VC 8-13
0699	-C	70		-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0699	0698	0729	----	6 A	-		SETL	4500BC	1	UNDER VC 6-27
0705	-C	70		-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0699	0698	0729	----	6 A	-		SETL	4500BC	1	UNDER VC ?
0720	-C	70		-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0699	0698	0729	----	6 A	-		SETL	4500BC	1	UNDER VC 6-24
0731	-C	70		-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0699	0698	0729	----	6 A	-		SETL	4500BC	1	UNDER VC 6-25
0745	-C	70		-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0699	0698	0729	----	6 A	-		SETL	4500BC	1	UNDER VC 7-4,7
0849	-C	70		-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0699	0698	0729	----	6 A	-		SETL	4500BC	1	UNDER VC 6-28
0856	-C	70		-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0699	0698	0729	----	6 A	-		SETL	4500BC	1	UNDER VC 7-9
0714	-C	69		-1	-9	LEVELLING	ASSC			RUBBLE	E	PK	0714	0796	----	----	6 A	-		SETL	4500BC	1	RUBBLE 4 6-28
0721	-C	69		-1	-9	LEVELLING	ASSC			RUBBLE	E	PK	0714	0796	----	----	6 A	-		SETL	4500BC	1	RUBBLE 4 8-2
0853	-C	69		-1	-9	LEVELLING	ASSC			RUBBLE	E	PK	0714	0796	----	----	6 A	-		SETL	4500BC	1	RUBBLE 4 6-30
0858	-C	69		-1	-9	LEVELLING	ASSC			RUBBLE	E	PK	0714	0796	----	----	6 A	-		SETL	4500BC	1	RUBBLE 4 8-6
0729	-C	70		-1	-2	LEVELLING	ASSC			RUBBLE	E	PK	0729	----	0746	0699	6 A	-		SETL	4500BC	1	RUBBLE 14 6-30
0805	-C	70		-1	-2	LEVELLING	ASSC			RUBBLE	E	PK	0729	----	0746	0699	6 A	-		SETL	4500BC	1	RUBBLE 14 ?
0738	-C	70	2	-1	-1	LEVELLING	ASSC			RUBBLE	E	PK	0738	----	----	0729	6 A	-		SETL	4500BC	1	RUBBLE 6 7-7
0753	-C	70	2	-1	-1	LEVELLING	ASSC			RUBBLE	E	PK	0738	----	----	0729	6 A	-		SETL	4500BC	1	RUBBLE 6 7-8
0796	-C	69		-1	-4	LEVELLING	ASSC			RUBBLE	E	PK	0796	0714	----	----	6 A	-		SETL	4500BC	1	RUBBLE 4 6-24
0802	-C	69		-1	-4	LEVELLING	ASSC			RUBBLE	E	PK	0796	0714	----	----	6 A	-		SETL	4500BC	1	RUBBLE 4 6-25
0810	-C	69		-1	-4	LEVELLING	ASSC			RUBBLE	E	PK	0796	0714	----	----	6 A	-		SETL	4500BC	1	RUBBLE 4 6-26
0865	-C	69		-1	-4	LEVELLING	ASSC			RUBBLE	E	PK	0796	0714	----	----	6 A	-		SETL	4500BC	1	RUBBLE 4 8-4
1915	CDE-	73		-2	10	LEVELLING	ASSC			RUBBLE	G	PK	1915	0718	1917	1928	6 A	-		SETL	4500BC	1	RUBBLE 26 7-9
1916	CDE-	73		-2	10	LEVELLING	ASSC			RUBBLE	G	PK	1915	0718	1917	1928	6 A	-		SETL	4500BC	1	RUBBLE 26 7-10
1918	CDE-	73		-2	10	LEVELLING	ASSC			RUBBLE	G	PK	1915	0718	1917	1928	6 A	-		SETL	4500BC	1	RUBBLE 26 7-11
1922	CDE-	73		-2	13	LEVELLING	ASSC			RUBBLE	G	PK	1922	0718	1917	1928	6 A	-		SETL	4500BC	1	RUBBLE 26 7-11
1924	CDE-	73		-2	13	LEVELLING	ASSC			RUBBLE	G	PK	1922	0718	1917	1928	6 A	-		SETL	4500BC	1	RUBBLE 26 7-16
0868	-C	70	2	-1		WALLS	ASSC			BRICK	F	PK	----	----	----	0738	6 A	- 6 B	1	SETL	4500BC	1	RETAIN,WLS7-11
0704	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6 A	- 7 A		SETL	4500BC	1	MIXED 6-28
0719	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6 A	- 7 A		SETL	4500BC	1	MIXED 7-1
0728	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6 A	- 7 A		SETL	4500BC	1	MIXED 7-5
0747	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6 A	- 7 A		SETL	4500BC	1	MIXED ?
0748	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6 A	- 7 A		SETL	4500BC	1	MIXED ?
0792	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6 A	- 7 A		SETL	4500BC	1	MIXED 6-29
0795	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6 A	- 7 A		SETL	4500BC	1	MIXED 7-6
0843	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6 A	- 7 A		SETL	4500BC	1	MIXED 7-11
0167	-C	71	4	-1		ON FLOOR	IN	RM1		SOFT	E	FPK	----	----	0171	----	6 B	1-		SETL	4500BC	1	7-14
0727	-C	70		-3	-1	DRAIN	ASSC			RUBBLE	E	PK	----	0167	0785	----	6 B	1-		SETL	4500BC	1	7-13
1377	BW	73	2	-3		UNDIF.FILL	NONE			SOFT	G	PK	----	1349	----	----	6 B	1-		SETL	4500BC	1	8-13,14
1349	CW	73	3	-2		UNDIF.FILL	NONE			SFT/BK	G	PK	----	1377	----	----	6 B	1-		SETL	4500BC	1	8-9

LOC	SQR	YR	TT	STR	FEA	FLR/FL/FTR	IN/X	ICX	ECX	FILL	Q	REC	SAME	CTMN	EARL	LATE	PERIOD	--PERIOD	SITE	DATE	C	COMMENT	
0746	-C	70		-2		UNDIF.FILL	NONE			??	G	PK	0746	1914	0727	0729	6 B	1-	SETL	4500BC	1		7-2
0851	-C	70		-2		UNDIF.FILL	NONE			??	G	PK	0746	1914	0727	0729	6 B	1-	SETL	4500BC	1		7-1
0820	-C	69		7A		UNDIF.FILL	NONE			BRICK	G	PK	0820	1349	0779	----	6 B	1-	SETL	4500BC	1		8-10
0825	-C	69		7A		UNDIF.FILL	NONE			BRICK	G	PK	0820	1349	0779	----	6 B	1-	SETL	4500BC	1		8-9
1914	CDE-	73		-3		UNDIF.FILL	NONE			HARD	G	PK	1914	0820	1922	----	6 B	1-	SETL	4500BC	1	YELW.CLAY	7-8
1919	CDE-	73		-3		UNDIF.FILL	NONE			HARD	G	PK	1914	0820	1922	----	6 B	1-	SETL	4500BC	1	YEL.CLAY	7-11
1920	CDE-	73		-3		UNDIF.FILL	NONE			HARD	G	PK	1914	0820	1922	----	6 B	1-	SETL	4500BC	1	YEL.CLAY	7-10
1921	CDE-	73		2-3		UNDIF.FILL	NONE			HARD	F	PK	----	----	----	----	6 B	1- 6 B 2	SETL	4500BC	1	MXD.RUBBLE	7-14
1923	CDE-	73		-3	10	MIXED FILL	NONE			??	F	PK	----	----	----	----	6 B	1- 6 B 2	SETL	4500BC	1	MIXED	7-17
1927	CDE-	73		-2	20	WALLS	ASSC			BRICK	F	PK	----	----	----	----	6 B	1- 6 B 2	SETL	4500BC	1	FROM WALL	7-22
0717	-D	69	1	6-7		PLATFORM	NONE			BRICK	F	PK	----	0821	----	----	6 B	1- 6 B 2	SETL	4500BC	1		6-29
0779	-C	69		-7	20	LEVELLING	NONE			RUBBLE	E	PK	----	----	----	0820	6 B	2-	SETL	4500BC	1		6-29
0171	-C	71	4	-3		MIDDEN	NONE			ASHY	G	PK	----	0159	0188	0167	6 B	2-	SETL	4500BC	1	ASH 12	7-17
0159	-C	71	3	-2		UNDIF.FILL	NONE			SFT/BK	G	PK	----	0171	0188	0167	6 B	2-	SETL	4500BC	1	ASHY 12	7/3-10
0169	-C	71	4	-2		UNDIF.FILL	NONE			BRICK	G	PK	----	0171	0174	0167	6 B	2-	SETL	4500BC	1		7-15
1932	CDE-	73		-3	18	LEVELLING	NONE			RUBBLE	G	PK	----	1925	----	----	6 B	2-	SETL	4500BC	1	RUBBLE 18	7-24
0708	-C	70		-1	16	PLATFORM	ASSC			BRICK	G	PK	0708	0821	----	----	6 B	2-	SETL	4500BC	1	UP.PVG.2	7-11
0766	-C	70		-1	16	PLATFORM	ASSC			BRICK	G	PK	0708	0821	----	----	6 B	2-	SETL	4500BC	1	UP.PVG.2	7-15
0764	-C	70		-1	16	PLATFORM	ASSC			BRICK	G	PK	0708	0821	----	----	6 B	2-	SETL	4500BC	1	UP.PVG.2	7-14
0806	-C	70		-1	16	PLATFORM	ASSC			BRICK	G	PK	0708	0821	----	----	6 B	2-	SETL	4500BC	1	UP.PVG.2	7-13
0785	-C	70	7	-2		UNDIF.FILL	NONE			BRICK	G	PK	0785	0794	----	0727	6 B	2-	SETL	4500BC	1		8-9
0814	-C	70	7	-2		UNDIF.FILL	NONE			BRICK	G	PK	0785	0794	----	0727	6 B	2-	SETL	4500BC	1		8-6
0794	-C	70	5	-3		UNDIF.FILL	NONE			BRICK	G	PK	0794	0785	----	0727	6 B	2-	SETL	4500BC	1		7-21
0803	-C	70	5	-3		UNDIF.FILL	NONE			BRICK	G	PK	0794	0785	----	0727	6 B	2-	SETL	4500BC	1		7-19
0821	-C	70	6	-5		UNDIF.FILL	NONE			BRICK	G	PK	0821	0708	----	----	6 B	2-	SETL	4500BC	1		8-4
0854	-C	70	6	-5		UNDIF.FILL	NONE			BRICK	G	PK	0821	0708	----	----	6 B	2-	SETL	4500BC	1		8-3
1925	CDE-	73		-2	18	LEVELLING	NONE			RUBBLE	G	PK	1925	1932	----	----	6 B	2-	SETL	4500BC	1	RUBBLE 18	7-21
1926	CDE-	73		-2	18	LEVELLING	NONE			RUBBLE	G	PK	1925	1932	----	----	6 B	2-	SETL	4500BC	1	RUBBLE 18	7-22
1930	CDE-	73		-2	18	LEVELLING	NONE			RUBBLE	G	PK	1925	1932	----	----	6 B	2-	SETL	4500BC	1	RUBBLE 18	7-23
1931	CDE-	73	1	-4		UNDIF.FILL	OUT		??	BRICK	F	PK	1931	----	----	----	6 B	2- 7 A	DOMS	4500BC	1		7-24
1933	CDE-	73		-4		UNDIF.FILL	OUT		??	BRICK	F	PK	1931	----	----	----	6 B	2- 7 A	DOMS	4500BC	1		7-26
1934	CDE-	73	1	-4		UNDIF.FILL	OUT		??	BRICK	F	PK	1931	----	----	----	6 B	2- 7 A	DOMS	4500BC	1		7-24
0822	-C	70	7	-4	-2	IM.AB.FLR.	IN	RM3		RUBBLE	G	PK	----	----	----	0815	7 A	-	DOMS	5000BC	1		8-10
1376	-B	73	1	-3	-5	MIDDEN	NONE			ORGANC	G	PK	----	----	----	1373	7 A	-	SETL	5000BC	1		8-18
0188	-C	71	3	-3		ROOM FILL	ASSC			BRICK	G	PK	----	0158	0164	0737	7 A	-	DOMS	5000BC	1		7-22
0158	-C	71	3	-1		ROOM FILL	ASSC			BRICK	G	PK	----	0161	0164	0737	7 A	-	DOMS	5000BC	1	RM.FILL	7-1
0164	-C	71	3	-1	-4	FLR.+ABOVE	IN	RM3		BRICK	E	FPK	----	0163	----	0158	7 A	-	DOMS	5000BC	3	ROOM 4	7-6
0162	-C	71	3	-3	-1	FLR.+ABOVE	IN	RM3		SOFT	E	FPK	----	0164	----	0158	7 A	-	DOMS	5000BC	3	ROOM 8	7-7
0163	-C	71	3	-1	-5	FLR.+ABOVE	IN	RM1		BRICK	E	FPK	----	0164	----	0158	7 A	-	DOMS	5000BC	3	ROOM 5	7-6
0165	-C	71	3	-3	3-4	FLR.+ABOVE	ASSC			BRICK	E	FPK	----	0164	----	0158	7 A	-	DOMS	5000BC	1	MXD-OUO+IN	7-13
0166	-C	71	3	-3	-1	FLR.+ABOVE	IN	RM3		SOFT	E	FPK	----	0164	----	0158	7 A	-	DOMS	5000BC	3	ROOM 8	7-13
0732	-C	70	4	-1		UNDIF.FILL	ASSC			BRICK	G	PK	----	0174	0161	0708	7 A	-	DOMS	5000BC	1	"PLATFORM"	7-18
0751	-C	70	6	-6		UNDIF.FILL	ASSC			BRICK	G	PK	----	0174	0161	0708	7 A	-	DOMS	5000BC	1	"PLATFORM"	8-5
0793	-C	70	3	-1		UNDIF.FILL	ASSC			BRICK	G	PK	----	0174	0161	0708	7 A	-	DOMS	5000BC	1	"PLATFORM"	7-9
0837	-C	70	1	-1		UNDIF.FILL	ASSC			BRICK	G	PK	----	0174	0161	0708	7 A	-	DOMS	5000BC	1	"PLATFORM"	7-6
0842	-C	70	5	-5		UNDIF.FILL	ASSC			BRICK	G	PK	----	0174	0161	0708	7 A	-	DOMS	5000BC	1	"PLATFORM"	7-21
0862	-C	70	7	-3		UNDIF.FILL	ASSC			BRICK	G	PK	----	0174	0161	0708	7 A	-	DOMS	5000BC	1	"PLATFORM"	8-10
0174	-C	71	4	3A		IN FLOORS	OUT		OP-H	LAMIN.	G	PK	----	0737	0161	0708	7 A	-	DOMS	5000BC	1		7-20
0161	-C	71	2	-1		ROOM FILL	ASSC			BRICK	G	PK	0161	0158	0164	0737	7 A	-	DOMS	5000BC	3	FALL	6/27-7/1
0175	-C	71	2	-1		ROOM FILL	ASSC			BRICK	G	PK	0161	0158	0164	0737	7 A	-	DOMS	5000BC	3	FALL IN 1	7-21
0168	-C	71	3	-3	-4	FLR.+ABOVE	IN	RM3		BRICK	E	FPK	0168	0164	----	0158	7 A	-	DOMS	5000BC	3	ROOM 9	7-15
0172	-C	71	4	-4	-1	FLR.+ABOVE	IN	RM3		BRICK	E	FPK	0168	0164	----	0158	7 A	-	DOMS	5000BC	1	ROOM 9	7-19
0209	-C	71	4	-4	-2	FLR.+ABOVE	IN	RM3		BRICK	E	FPK	0168	0164	----	0158	7 A	-	DOMS	5000BC	1	ROOM 9	7-24
0170	-C	71	4	-3	-1	FLR.+ABOVE	IN	RM3		BRICK	E	FPK	0170	0164	----	0158	7 A	-	DOMS	5000BC	3	ROOM 10	7-15
0173	-C	71	4	-4	-2	FLR.+ABOVE	IN	RM3		BRICK	E	FPK	0170	0164	----	0158	7 A	-	DOMS	5000BC	1	ROOM 10	7-19
0737	-C	70		1A		UNDIF.FILL	ASSC			BRICK	G	PK	0737	0174	0161	0708	7 A	-	DOMS	5000BC	1	"PLATFORM"	7-16
0757	-C	70		1A		UNDIF.FILL	ASSC			BRICK	G	PK	0737	0174	0161	0708	7 A	-	DOMS	5000BC	1	"PLATFORM"	7-18
0866	-C	70		1A		UNDIF.FILL	ASSC			BRICK	G	PK	0737	0174	0161	0708	7 A	-	DOMS	5000BC	1	"PLATFORM"	7-15
0815	-C	70	7	-4		UNDIF.FILL	ASSC			BRICK	G	PK	0815	0174	0161	0708	7 A	-	DOMS	5000BC	1	"PLATFORM"	8-15
0832	-C	70	7	-4		UNDIF.FILL	ASSC			BRICK	G	PK	0815	0174	0161	0708	7 A	-	DOMS	5000BC	1	"PLATFORM"	8-13
1373	-B	73	1	-3	-1	MIDDEN	NONE			SOFT	G	PK	1373	----	1376	----	7 A	-	SETL	5000BC	1		8-18
1374	-B	73	1	-3	-1	MIDDEN	NONE			SOFT	G	PK	1373	----	1376	----	7 A	-	SETL	5000BC	1		8-19
1375	-B	73	1	-3	-1	MIDDEN	NONE			SOFT	G	PK	1373	----	1376	----	7 A	-	SETL	5000BC	1		8-20
1935	CDE-	73		-4		UNDIF.FILL			??	BRICK	F	PK	1935	----	----	----	7 A	- 7 B 2	DOMS	5000BC	1		7-29
1936	CDE-	73		-4		UNDIF.FILL			??	BRICK	F	PK	1935	----	----	----	7 A	- 7 B 2	DOMS	5000BC	1		7-28
1937	CDE-	73		-4		UNDIF.FILL			??	BRICK	F	PK	1935	----	----	----	7 A	- 7 B 2	DOMS	5000BC	1		7-30
1938	CDE-	73	1	-4		UNDIF.FILL	OUT		??	BRICK	F	PK	1935	----	----	----	7 A	- 7 B 2	DOMS	5000BC	1		7030
1939	CDE-	73		-4		UNDIF.FILL			??	BRICK	F	PK	1935	----	----	----	7 A	- 7 B 2	DOMS	5000BC	1		7-31
1940	CDE-	73		-4		UNDIF.FILL			??	BRICK	F	PK	1935	----	----	----	7 A	- 7 B 2	DOMS	5000BC	1		8-1
0183	-C	71	7	-1		FLR.+ABOVE	OUT		OP-F	??	G	FPK	----	----	----	0211	7 B	1-	DOMS	5000BC	1		8-10
2301	-D	73		-6	31	FLR.+ABOVE	ASSC			SANDY	G	FPK	----	----	2302	----	7 B	1-	DOMS	5000BC	1		7-23
0182	-C	71	6	-1	-6A	FLR.+ABOVE	OUT		OP-F	SOFT	E	FPK	0182	----	----	0192	7 B	1-	DOMS	5000BC	1		8-5
0197	-C	71	6	-1	-6A	FLR.+ABOVE	OUT		OP-F	SOFT	E	FPK	0182	----	----	0192	7 B	1-	DOMS	5000BC	1		8-4
0215	-C	71	6	-1	-6A	FLR.+ABOVE	OUT		OP-F	SOFT	E	FPK	0182	----	----	0192	7 B	1-	DOMS	5000BC	1		8-3
0192	-C	71	6	1A		FLR.+ABOVE	OUT		OP-F	??	E	FPK	0192	0211	0182	----	7 B	1-	DOMS	5000BC	1		8-3
0194	-C	71	6	1A		FLR.+ABOVE	OUT		OP-F	??	E	FPK	0192	0211	0182	----	7 B	1-	DOMS	5000BC	1		7-28
0206	-C	71	6	1A		FLR.+ABOVE	OUT		OP-F	??	E	FPK	0192	0211	0182	----	7 B	1-	DOMS	5000BC	1		8-2
0207	-C	71	6	1A		FLR.+ABOVE	OUT		OP-F	??	E	FPK	0192	0211	0182	----	7 B	1-	DOMS	5000BC	1		8-1
0211	-C	71	7	1A		FLR.+ABOVE	OUT		OP-F	??	E	FPK	0211	0192	0182	----	7 B	1-	DOMS	5000BC	1		8-7
0212	-C	71	7	1A		FLR.+ABOVE	OUT		OP-F	??	E	FPK	0211	0192	0182	----	7 B	1-	DOMS	5000BC	1		8-9
0764	-C	70	6	-1		UNDIF.FILL	NONE			HARD	F	RPK	----	0713	----	----	7 B	1- 7 B 6	DOMS	5000BC	1		7-23
0713	-C	70	5	-2		UNDIF.FILL	NONE			HARD	F	RPK	0713	0764	----	----	7 B	1- 7 B 6	DOMS	5000BC	1		7-19
0754	-C	70	5	-2		UNDIF.FILL	NONE			HARD	F	RPK	0713	0764	----	----	7 B	1- 7 B 6	DOMS	5000BC	1		7-22
0765	-C	70	5	-2		UNDIF.FILL	NONE			HARD	F	RPK	0713	0764	----	----	7 B	1- 7 B 6	DOMS	5000BC	1		7-20
0839	-C	70	5	-2		UNDIF.FILL	NONE			HARD	F	RPK	0713	0764	----	----	7 B	1- 7 B 6	DOMS	5000BC	1		7-21
0886	-E	69	2	-3		FLR.+ABOVE	OUT		OP-N	??	E	PK	----	----	0876	----	7 B	2-	DOMS	5000BC	1	BETW.1+2	6-26
0855	-C	70	6	-7		MIDDEN	OUT		OP-N	ASHY	G	FPK	----	0185	----	0187	7 B	2-	DOMS	5000BC	1		8-18
0195	-C	71	6	-1	-5	ON FLOOR	IN	RM3		ASHY	E	FPK	----	0187	----	----	7 B	2-	DOMS	5000BC	3	RM.8	8-15
0196	-C	71	6	-1	-9	IM.AB.FLR.	IN	RM1		ASHY	E	FPK	----	0187	----	----	7 B	2-	DOMS	5000BC	3	ROOM 4	8-14
0198	-C	71	6	-1	-7	IN FLOORS	IN	RM1		ASHY	E	FPK	----	0187	----	----	7 B	2-	DOMS	5000BC	3	ROOM 5	7-31
0200	-C	71	6	-1	-6	IN FLOORS	OUT		CORT	HARD	E	FPK	----	0187	----	----	7 B	2-	DOMS	5000BC	3	COURT 23	8-7
0203	-C	71	6	-1	-6	IN FLOORS	OUT		CORT	HARD	E	FPK	----	0187	----	----	7 B	2-	DOMS	5000BC	3	COURT 23	7-31
0213	-C	71	6	-1	-6	IN FLOORS	OUT		CORT	HARD	E	FPK	----	0187	----	----	7 B	2-	DOMS	5000BC	3	COURT 23	8-7
2303	-D	73		-6	27	ON FLOOR	IN	RM1		BURNED	E	FPK	----	0187	----	----	7 B	2-	DOMS	5000BC	1	ROOM 25	7-31
0185	-C	71	7	-2		MIDDEN	OUT		OP-N	ASHY	G	FPK	----	0855	----	0187	7 B	2-	DOMS	5000BC	1		8-15
2103	-C	73		-1	1-2	IN FLOORS	OUT		OP-N	LAMIN.	G	FPK	----	2102	2106	0201	7 B	2-	DOMS	5000BC	1		6-23
2104	-C	73	1	-1		IN FLOORS	OUT		OP-N	LAMIN.	G	FPK	----	2102	2106	0201	7 B	2-	DOMS	5000BC	1		6-24
2102	-C	73		-1	-1	IN FLOORS	OUT		OP-N	LAMIN.	G	FPK	----	2103	2106	0201	7 B	2-	DOMS	5000BC	1		6-21
0184	-C	71	6	-1	-2	IM.AB.FLR.	OUT		ALLY	ASHY	E	FPK	0184	0187	----	----	7 B	2-	DOMS	5000BC	3	ALLEY 7	7-28
0186	-C	71	6	-1	-2	IM.AB.FLR.	OUT		ALLY	ASHY	E	FPK	0184	0187	----	----	7 B	2-	DOMS	5000BC	3	ALLEY 7	7-28
0193	-C	71	6	-1	-2	IM.AB.FLR.	OUT		ALLY	ASHY	E	FPK	0184	0187	----	----	7 B	2-	DOMS	5000BC	3	ALLEY 7	7-27
0202	-C	71	6	-1	-2	IM.AB.FLR.	OUT		ALLY	ASHY	E	FPK	0184	0187	----	----	7 B	2-	DOMS	5000BC	3	ALLEY 7	8-14

LOC	SQR	YR	TT	STR	FEA	FLR/FL/FTR	IN/X	ICX	ECX	FILL	Q	REC	SAME	CTMN	EARL	LATE	PERIOD			--PERIOD			SITE	DATE	C	COMMENT	
0204	-C	71	6	-1	-2	IM.AB.FLR.	OUT		ALLY	ASHY	E	FPK	0184	0187	----	----	7	B	2-				DOMS	5000BC	3	ALLEY 7	7-29
0210	-C	71	6	-1	-2	IM.AB.FLR.	OUT		ALLY	ASHY	E	FPK	0184	0187	----	----	7	B	2-				DOMS	5000BC	3	ALLEY 7	7-26
0187	-C	71	6	-1	-1	IN FLOORS	IN	RM1		ASHY	E	FPK	0187	----	----	----	7	B	2-				DOMS	5000BC	3	ROOM 6	7-28
0200	-C	71	6	-1	-1	IN FLOORS	IN	RM1		ASHY	E	FPK	0187	----	----	----	7	B	2-				DOMS	5000BC	3	ROOM 6	7-27
0189	-C	71	6	-1	-3	IN FLOORS	IN	RM1		ASHY	E	FPK	0189	0187	----	----	7	B	2-				DOMS	5000BC	3	ROOM 3	7-28
0190	-C	71	6	-1	-3	IN FLOORS	IN	RM1		ASHY	E	FPK	0189	0187	----	----	7	B	2-				DOMS	5000BC	3	ROOM 3	7-27
0214	-C	71	6	-1	-3	IN FLOORS	IN	RM1		ASHY	E	FPK	0189	0187	----	----	7	B	2-				DOMS	5000BC	3	ROOM 3	8-11
0191	-C	71	6	-1	-4	IN FLOORS	IN	RM1		ASHY	E	FPK	0191	0187	----	----	7	B	2-				DOMS	5000BC	3	ROOM 2	7-29
0199	-C	71	6	-1	-4	IN FLOORS	IN	RM1		ASHY	E	FPK	0191	0187	----	----	7	B	2-				DOMS	5000BC	3	RM.2	8-11,12
0201	-C	71	6	-1	-8	IN FLOORS	OUT		OP-N	HARD	E	FPK	0201	0187	----	----	7	B	2-				DOMS	5000BC	1		8-12
0205	-C	71	6	-1	-8	IN FLOORS	OUT		OP-N	HARD	E	FPK	0201	0187	----	----	7	B	2-				DOMS	5000BC	1		8-14
2101	-C	73		-5		FLR.LEVEL	ASSC			??	F	FPK	----	----	----	----	7	B	2-	7	B	3	DOMS	5000BC	1	CLEANUP VIIB2	
2105	-C	73	1	1-2		MIXED FILL	OUT		OP-N	SO/BRK	F	PK	----	----	----	----	7	B	2-	7	B	3	DOMS	5000BC	1		6-23
2111	-C	73	1			FLR.LEVEL	ASSC			??	F	FPK	----	----	----	----	7	B	2-	7	B	3	DOMS	5000BC	1	EXC.V11B2 RMS.	
2109	-C	73	1	-5		FLR.+ABOVE	OUT		OP-N	SOFT	E	FPK	----	----	----	2113	7	B	3-				DOMS	5000BC	1		6-28
2110	-C	73	1	-4		FLR.+ABOVE	OUT		OP-N	SOFT	E	FPK	----	----	----	2113	7	B	3-				DOMS	5000BC	1		6-28
2108	-C	73		-3		FLR.+ABOVE	OUT		OP-N	SOFT	G	FPK	----	2113	2110	2106	7	B	3-				DOMS	5000BC	1	INC T1	6-25,26
2302	-D	73		-7	31	FLR.+ABOVE	ASSC			SANDY	E	FPK	----	2304	----	----	7	B	3-				DOMS	5000BC	1		7-23
2306	-D	73		-7	44	UNDIF.FILL	OUT		OP-N	LAMIN.	G	FPK	----	2304	----	----	7	B	3-				DOMS	5000BC	1		8-5
2304	-D	73		-7	43	UNDIF.FILL	OUT		OP-N	LAMIN.	G	FPK	----	2306	2305	----	7	B	3-				DOMS	5000BC	1		8-1
2106	-C	73	1	-2		FLR.+ABOVE	OUT		OP-N	BRICK	E	FPK	2106	----	2113	2104	7	B	3-				DOMS	5000BC	1		6-24
2107	-C	73	1	-2		FLR.+ABOVE	OUT		OP-N	BRICK	E	FPK	2106	----	2113	2104	7	B	3-				DOMS	5000BC	1		6-25
2113	-C	73	1	-3		FLR.+ABOVE	OUT		OP-N	LAMIN.	G	FPK	2113	2108	2110	2106	7	B	3-				DOMS	5000BC	1		7-3,4
2116	-C	73	1	-3		FLR.+ABOVE	OUT		OP-N	LAMIN.	G	FPK	2113	2108	2110	2106	7	B	3-				DOMS	5000BC	1		7-4
2307	-D	73		-7	42	MIDDEN	OUT		OP-N	ASHY	G	OTH	2307	----	----	----	7	B	3-	7	B	5	DOMS	5000BC	1	PART SCRND	8-8
2308	-D	73		-7	42	MIDDEN	OUT		OP-N	ASHY	G	OTH	2307	----	----	----	7	B	3-	7	B	5	DOMS	5000BC	1	PART SCRND	8-7
2309	-D	73		-7	42	MIDDEN	OUT		OP-N	ASHY	G	OTH	2307	----	----	----	7	B	3-	7	B	5	DOMS	5000BC	1	PART SCRND	8-7
2112	-C	73		-6		FLR.+ABOVE	NONE			ASHY	E	PK	----	----	----	----	7	B	3-	7	B	6	DOMS	5000BC	1	W.OF T1	7-1,2
2305	-D	73		-8	43	UNDIF.FILL	OUT		OP-N	LAMIN.	G	FPK	----	----	----	2304	7	B	4-				DOMS	5000BC	1		8-5
1941	CDE-	73	2	-5		FLR.+ABOVE	ASSC			BRICK	G	PK	1941	----	----	----	7	B	4-				DOMS	5000BC	1		8-2
1942	CDE-	73	2	-5		FLR.+ABOVE	ASSC			BRICK	G	PK	1941	----	----	----	7	B	4-				DOMS	5000BC	1		8-1
2115	-C	73	1	-8		FLR.+ABOVE	ASSC			BRICK	G	RPK	----	----	----	----	7	B	4-	7	B	6	DOMS	5000BC	1		7-9,10
0883	-E	69	3	-2		FLR.LEVEL	IN	RM3		ASHY	G	PK	----	----	0887	----	7	B	5-	7	B	6	DOMS	5000BC	1	ROOM 22	6-24
0877	-E	69	3	-2		FLR.+ABOVE	IN	RM3		BRICK	G	PK	----	0881	0883	----	7	B	5-	7	B	6	DOMS	5000BC	1	+T7.4=885	6-23
0876	-E	69	3	-2		FLR.+ABOVE	IN	RM3		BRICK	G	PK	0881	0885	0883	----	7	B	5-	7	B	6	DOMS	5000BC	1	ROOM 22	6-14
0878	-E	69	3	-2		FLR.+ABOVE	IN	RM3		BRICK	G	PK	0881	0885	0883	----	7	B	5-	7	B	6	DOMS	5000BC	1	ROOM 22	6-29
0881	-E	69	3	-2	-1	FLR.+ABOVE	IN	RM3		BRICK	G	PK	0881	0885	0883	----	7	B	5-	7	B	6	DOMS	5000BC	1	-N.BK.RM22	6-25
0885	-E	69	7	-4	-1	FLR.+ABOVE	IN	RM1		BRICK	G	PK	0885	0881	0887	----	7	B	5-	7	B	6	DOMS	5000BC	1	ROOM 21	6-26
0889	-E	69	7	-4	-1	FLR.+ABOVE	IN	RM1		BRICK	G	PK	0885	0881	0887	----	7	B	5-	7	B	6	DOMS	5000BC	1	ROOM 21	6-12
0884	-E	69	2	-4	-5	FLR.+ABOVE	IN	RM3		BRICK	G	PK	----	----	----	----	7	B	6-				DOMS	5000BC	1	ROOM 7	7-15
0888	-E	69	2	-5		FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	----	----	0880	----	7	B	6-				DOMS	5000BC	1		7-13
0893	-E	69	3	11		IN FLOORS	OUT		OP-N	HARD.	G	PK	----	----	0887	----	7	B	6-				DOMS	5000BC	1	AGNST WLL	7-22
0887	-E	69	3	12		IN FLOORS	OUT		OP-N	SFT/BK	G	PK	----	0880	----	----	7	B	6-				DOMS	5000BC	1	BLDG.SFS.	7-13
0880	-E	69	2	-8		IN FLOORS	OUT		OP-N	HARD	G	PK	0880	0887	----	0888	7	B	6-				DOMS	5000BC	1	BLDG.SFS.	7-14
0892	-E	69	2	-8		IN FLOORS	OUT		OP-N	HARD	G	PK	0880	0887	----	0888	7	B	6-				DOMS	5000BC	1	BLDG.SFS.	7-13
2114	-C	73	1	6-8		UNDIF.FILL	NONE			HARD	G	RPK	----	2117	----	----	7	C	1-				DOMS	5000BC	1	= C.73.7	7-14
0701	-D	69	1	11		UNDIF.FILL	NONE			HARD	G	RPK	0701	----	----	----	7	C	1-				SETL	5000BC	1		7-13
0749	-D	69	1	11		UNDIF.FILL	NONE			HARD	G	RPK	0701	----	----	----	7	C	1-				SETL	5000BC	1		7-12
0813	-C	70	6	-2		UNDIF.FILL	NONE			HARD	G	RPK	0813	0816	----	----	7	C	1-				SETL	5000BC	1	BURIALS	7-27
0831	-C	70	6	-2		UNDIF.FILL	NONE			HARD	G	RPK	0813	0816	----	----	7	C	1-				SETL	5000BC	1		7-26
0852	-C	70	6	-2		UNDIF.FILL	NONE			HARD	G	RPK	0813	0816	----	----	7	C	1-				SETL	5000BC	1		7-28
0816	-C	70	5	-4		UNDIF.FILL	NONE			HARD	G	RPK	0816	0813	----	----	7	C	1-				SETL	5000BC	1		7-21
0836	-C	70	5	-4		UNDIF.FILL	NONE			HARD	G	RPK	0816	0813	----	----	7	C	1-				SETL	5000BC	1		7-22
2117	-C	73		6-9		UNDIF.FILL	NONE			BRICK	G	RPK	2117	2114	----	----	7	C	1-				DOMS	5000BC	1	= C.73.7	7-15
2121	-C	73		6-9		UNDIF.FILL	NONE			BRICK	G	RPK	2117	2114	----	----	7	C	1-				DOMS	5000BC	1	= C.73.7	7-16
2124	-C	73		6-9		UNDIF.FILL	NONE			BRICK	G	RPK	2117	2114	----	----	7	C	1-				DOMS	5000BC	1	= C.73.7	7-16
0847	-C	70	5	-6		MIXED FILL	ASSC			HARD	F	RPK	----	0763	----	----	7	C	1-	7	C	2	SETL	5000BC	1		7-25
0178	-C	70	6	-3		MIXED FILL	ASSC			HARD	F	RPK	0763	0847	----	----	7	C	1-	7	C	2	SETL	5000BC	1		7-29
0763	-C	70	6	-3		MIXED FILL	ASSC			HARD	F	RPK	0763	0847	----	----	7	C	1-	7	C	2	SETL	5000BC	1		[illegible]
0824	-C	70	6	-3		MIXED FILL	ASSC			HARD	F	RPK	0763	0847	----	----	7	C	1-	7	C	2	SETL	5000BC	1		[illegible]
0829	-C	70	6	-3		MIXED FILL	ASSC			HARD	F	RPK	0763	0847	----	----	7	C	1-	7	C	2	SETL	5000BC	1		7-30
2118	-C	73	1	-9		UNDIF.FILL	ASSC			BRICK	G	RPK	2118	2119	----	----	7	C	2-				DOMS	5000BC	1		7-11
2122	-C	73	1	-9		UNDIF.FILL	ASSC			BRICK	G	RPK	2118	2119	----	----	7	C	2-				DOMS	5000BC	1		7-22
2125	-C	73	1	-9		UNDIF.FILL	ASSC			BRICK	G	RPK	2118	2119	----	----	7	C	2-				DOMS	5000BC	1		7-23
2119	-C	73	2	-9		UNDIF.FILL	ASSC			BRICK	G	RPK	2119	2126	----	----	7	C	2-				DOMS	5000BC	1		7-19
2120	-C	73	2	-9		UNDIF.FILL	ASSC			BRICK	G	PPK	2119	2126	----	----	7	C	2-				DOMS	5000BC	1		7-17,18
2123	-C	73	2	-9		UNDIF.FILL	ASSC			BRICK	G	RPK	2119	2126	----	----	7	C	2-				DOMS	5000BC	1		7-21
2126	-C	73		-9		FLR.+ABOVE	ASSC			BRICK	G	PK	2126	2118	----	----	7	C	2-				DOMS	5000BC	1		7-25,26
2127	-C	73		-9		FLR.+ABOVE	ASSC			BRICK	G	PK	2126	2118	----	----	7	C	2-				DOMS	5000BC	1		7-24,25
2128	-C	73		-9		FLR.+ABOVE	ASSC			BRICK	G	PK	2126	2118	----	----	7	C	2-				DOMS	5000BC	1		7-26
2129	-C	73		-9		FLR.+ABOVE	ASSC			BRICK	G	PK	2126	2118	----	----	7	C	2-				DOMS	5000BC	1		7-28
0867	-C	70	6	-4		MIXED FILL	OUT		OP-N	GEL	G	RPK	----	0850	----	----	7	D	-				SETL	5000BC	1	MNY SHRDS	8-1
0157	-C	71	1	-1		MIXED FILL	ASSC			GEL	G	RPK	0157	----	----	----	7	D	-				SETL	5000BC	1		6-12,15,13
0179	-C	71	1	-1		MIXED FILL	ASSC			GEL	G	RPK	0157	----	----	----	7	D	-				SETL	5000BC	1		6-13
0180	-C	71	1	-1		MIXED FILL	ASSC			GEL	G	RPK	0157	----	----	----	7	D	-				SETL	5000BC	1	CU PIN	6-14
0780	-C	70	5	-7		GRAVE	OUT		OP-N	GEL	G	PK	0780	----	----	----	7	D	-				SETL	5000BC	1	BUDIAL#2	7-28
0817	-C	70	5	-7		MIXED FILL	OUT		OP-N	GEL	G	RPK	0780	----	----	----	7	D	-				SETL	5000BC	1		7-?
0827	-C	70	5	-7		MIXED FILL	OUT		OP-N	GEL	G	RPK	0780	----	----	----	7	D	-				SETL	5000BC	1		7-29
0850	-C	70	5	-7		MIXED FILL	OUT		OP-N	GEL	G	RPK	0780	----	----	----	7	D	-				SETL	5000BC	1	MNY SHRDS	7-27
0833	-C	70	5	-8		UNDIF.FILL				HARD	F	RPK	----	0160	----	----	7	E	-				DOMS	5000BC	1	STERILE SOIL	
0160	-C	71	1	-2		UNDIF.FILL				HARD	F	RPK	----	0833	----	----	7	E	-				SETL	5000BC	1	STERILE SOIL	

LOC	SQR	YR	TT	STR	FEA	FLR/FL/FTR	IN/X	ICX	ECX	FILL	Q	REC	SAME	CTMN	EARL	LATE	PERIOD	--PERIOD	SITE	DATE	C	COMMENT
3516	R37-	73		-7	-1	FLR.+ABOVE	ASSC			BRICK	E	FPK	----	----	3520	3518	7 1	-	DOMS	5000BC	1	?WALLFALL 7-4
3520	R37-	73		-9		FLR.LEVEL	ASSC			GEL	E	FPK	----	----	3521	3516	7 1	-	DOMS	5000BC	1	GEL FLOOR 7-4
3518	R37-	73		-8		FLR.+ABOVE	ASSC			SFT/BK	E	FPK	----	3515	3516	3515	7 1	-	DOMS	5000BC	1	BLW 7S;=7N 7-5
3515	R37-	73		-7		MIXED FILL	ASSC			SOFT	F	FPK	----	3518	3518	3511	7 1	- 7 2	DOMS	5000BC	1	MOSTLY PH2 7-4
3511	R37-	73		-6	-1	ROOM FILL	ASSC			ASHY	E	FPK	----	----	3515	3507	7 2	-	DOMS	5000BC	1	=T1.22.1 7-3/4
3553	R37-	73	1	25		FLR.+ABOVE	ASSC			SOFT	E	FPK	----	----	3518	3511	7 2	-	DOMS	5000BC	1	=3515 STH. 8-2
3558	R37-	73	1	-8							F	FPK	----	----	----	----	7 2	- 7 6 C	DOMS	5000BC	1	MIXED:8-25 ?
3559	R37-	73	1	22		IN FLOORS	ASSC			SOFT	G	FPK	----	----	3511	3556	7 3	-	DOMS	5000BC	1	=3507 STH. 8-1
3507	R37-	73		-6		MIXED FILL	ASSC			SOFT	F	FPK	----	----	3511	3504	7 3	- 7 4	DOMS	5000BC	1	=3560LWR 7-3/4
3560	R37-	73	1	17		IN FLOORS	OUT		ALLY	ASHY	G	FPK	----	----	----	3535	7 3	- 7 5	DOMS	5000BC	1	114CM THK 7-31
3554	R37-	73	1	21		LEVELLING	ASSC			GEL	E	FPK	----	----	----	3556	7 4	-	DOMS	5000BC	1	=3551 LWR.7-31
3556	R37-	73	1	19		IN FLOORS	IN	RM3		MIXED	G	FPK	----	3504	3554	3533	7 4	-	DOMS	5000BC	1	22LRS=R#A 7-31
3561	R37-	73	1	23		IN FLOORS	OUT		ALLY	MIXED	G	FPK	----	3551	----	3563	7 4	-	DOMS	5000BC	1	MID=9FLRS.7-31
3504	R37-	73		5A5		FLR.+ABOVE	IN	RM3		SOFT	G	FPK	----	3556	3507	3502	7 4	-	DOMS	5000BC	1	ROOM#A 7-3
3551	R37-	73	1	24		MIXED FILL	ASSC			MIXED	G	FPK	----	----	----	3546	7 4	- 7 5	DOMS	5000BC	1	MID.=RM#B 8-1
3509	R37-	73		1-5							P	FPK	----	----	----	----	7 4	- 7 6 E	DOMS	5000BC	1	MIXED 7-3
3501	R37-	73		-3		ROOM FILL	OUT		ALLY	SOFT	E	FPK	----	----	3507	3510	7 5	-	DOMS	5000BC	1	=3560 UPPR 7-3
3533	R37-	73	1	-4	-5	LEVELLING	ASSC			GEL	E	FPK	----	----	3533	3542	7 5	-	DOMS	5000BC	1	FDN.LVLNG 7-24
3539	R37-	73	1	-4	-3	IM.AB.FLR.	IN	RM3		ASHY	E	FPK	----	----	3542	3567	7 5	-	DOMS	5000BC	1	ROOM#1 7-24
3542	R37-	73	1	-4	-4	IM.AB.FLR.	IN	RM3		SOFT	E	FPK	----	----	3533	3539	7 5	-	DOMS	5000BC	1	ROOM#1 7-24
3546	R37-	73	1	-9		FLR.+ABOVE	IN	RM3		SOFT	G	FPK	----	----	3551	3545	7 5	-	DOMS	5000BC	1	ROOM#4 7-23
3563	R37-	73	1	20		FLR.+ABOVE	OUT		ALLY	HARD	E	FPK	----	----	3561	3557	7 5	-	DOMS	5000BC	1	ALLEY 7-30
3567	R37-	73	1	-4		MIXED FILL	IN	RM3		SOFT	G	FPK	----	3548	3539	3571	7 5	-	DOMS	5000BC	1	ROOM#1 7-19
3548	R37-	73	1	-7		IM.AB.FLR.	IN	RM3		SOFT	E	FPK	----	3567	----	3538	7 5	-	DOMS	5000BC	1	ROOM#6 7-23
3557	R37-	73	1	18		FLR.+ABOVE	OUT		ALLY	SOFT	E	FPK	3557	----	3563	----	7 5	-	DOMS	5000BC	1	OCC.DEBRS.7-29
3562	R37-	73	1	18		FLR.+ABOVE	OUT		ALLY	SOFT	E	FPK	3557	----	3563	----	7 5	-	DOMS	5000BC	1	OCC.DEBRS.7-30
3534	R37-	73	1	-3	-7	WALLS	ASSC			SOFT	G	FPK	3502	----	3556	3566	7 5	- 7 6	DOMS	5000BC	1	BTW.WALLS 7-22
3565	R37-	73	1	26		MIXED FILL	ASSC			MIXED	G	FPK	----	----	----	3547	7 5	- 7 6 C	DOMS	5000BC	1	LOW=ROOM#D ?
3502	R37-	73		-3	-1	WALLS	ASSC			SOFT	G	FPK	3502	----	3504	3510	7 5	- 7 6 E	DOMS	5000BC	1	BETW.WALLS 7-3
3552	R37-	73	1	15		LEVELLING	ASSC			BRICK	E	FPK	----	----	----	3555	7 6	A-	DOMS	5000BC	1	RM#E FILL 8-1
3541	R37-	73	1	5-8	-2	FLR.+ABOVE	OUT		ALLY	ASHY	G	FPK	----	----	----	3568	7 6	C-	DOMS	5000BC	1	=3549+50 7-23
3555	R37-	73	1	14		ROOM FILL	ASSC			SOFT	E	FPK	----	----	3552	----	7 6	C-	DOMS	5000BC	1	RM#E AREA 7-29
3550	R37-	73	1	-5		ROOM FILL	OUT		ALLY	ASHY	E	FPK	----	3532	3549	3564	7 6	C-	DOMS	5000BC	1	"ROOM#5" 7-23
3532	R37-	73	1	-5	-2	ROOM FILL	OUT		ALLY	ASHY	E	FPK	----	3550	3549	3568	7 6	C-	DOMS	5000BC	1	ALLEY 7-23
3549	R37-	73	1	-8		FLR.+ABOVE	OUT		ALLY	ASHY	E	FPK	----	3555	----	3550	7 6	C-	DOMS	5000BC	1	"ROOM#5" 7-24
3506	R37-	73		-2		ROOM FILL	IN	RM3		SOFT	G	FPK	----	3535	3501	3510	7 6	C- 7 6 D	DOMS	5000BC	1	MOSTLY RM9 7-3
3571	R37-	73	1	-3		LEVELLING	ASSC			GEL	E	FPK	----	3545	3567	3566	7 6	C- 7 6 D	DOMS	5000BC	1	RM#1 FILL 7-17
3572	R37-	73	1	-3	-6	ROOM FILL	OUT		ALLY	SOFT	E	FPK	----	3568	3532	3566	7 6	C- 7 6 D	DOMS	5000BC	1	TOP=LVLNG 7-19
3538	R37-	73	1	-6		LEVELLING	ASSC			GEL	E	FPK	----	3571	3548	----	7 6	C- 7 6 D	DOMS	5000BC	1	RM#6 FULL 7-22
3545	R37-	73	1	-2	-4	LEVELLING	ASSC			RUBBLE	E	FPK	----	3571	3546	3574	7 6	C- 7 6 D	DOMS	5000BC	1	RM#4 FILL 7-21
3547	R37-	73	1	-2	2-2	IM.AB.FLR.	IN	RM3		SFT/BK	E	FPK	----	3546	3565	3543	7 6	D-	DOMS	5000BC	1	ROOM#2 7-22
3536	R37-	73	1	-2	3-1	MIXED FILL	IN	RM3		MIXED	G	FPK	----	3547	3555	3543	7 6	D-	DOMS	5000BC	1	ROOM#3 7-22
3535	R37-	73	1	-3	-9	LEVELLING	ASSC			SFT/BK	E	FPK	----	3564	----	3573	7 6	D-	DOMS	5000BC	1	=3506 NTH 7-23
3564	R37-	73	1	-3	-8	LEVELLING	ASSC			GEL	G	FPK	----	3572	3550	3566	7 6	D-	DOMS	5000BC	1	LEVELING 7-22
3568	R37-	73	1	-3	-2	ROOM FILL	OUT	?;	ALLY	ASHY	E	FPK	----	3572	3532	3566	7 6	D-	DOMS	5000BC	1	ALLEY 7-17
3510	R37-	73		-1		SURFACE	ASSC			SOFT	P	FPK	----	----	3506	----	7 6	E-	SETL	5000BC	1	SURFACE 7-3
3569	R37-	73	1	-2		UNDIF.FILL	ASSC			SOFT	F	FPK	----	----	3535	3574	7 6	E-	SETL	5000BC	1	BELOW SUR.7-18
3573	R37-	73	1	-1	-3	SURFACE	ASSC			SOFT	P	FPK	----	3531	3570	3537	7 6	E-	SETL	5000BC	1	MXD.W/74 7-18
3540	R37-	73	1	-5	-1	MIXED FILL				SOFT	P	FPK	----	3537	3574	----	7 6	E-	SETL	5000BC	1	SURF.DEP. 7-21
3537	R37-	73	1	-5		SURFACE				SOFT	P	FPK	----	3540	3574	----	7 6	E-	DOMS	5000BC	1	SURF.DEP. 7-21
3566	R37-	73	1	-2	-1	ROOM FILL	ASSC			HARD	F	FPK	----	3543	3572	3574	7 6	E-	SETL	5000BC	1	DEBRIS 7-17
3570	R37-	73	1	-2	-3	ROOM FILL	IN	RM3		SOFT	E	FPK	----	3543	3536	3573	7 6	E-	SETL	5000BC	1	ROOM#3+9 7-19
3531	R37-	73	1	-1	-2	SURFACE	ASSC			SOFT	P	FPK	----	3573	3543	3537	7 6	E-	SETL	5000BC	1	SURF.SOIL 7-21
3574	R37-	73	1	-1	-1	SURFACE	ASSC			SOFT	P	FPK	----	3573	3569	3537	7 6	E-	SETL	5000BC	1	SURF.DEP. 7-16
3543	R37-	73	1	-2	-2	MIXED FILL	IN	RM3		SOFT	E	FPK	3543	3570	3547	3531	7 6	E-	SETL	5000BC	1	ROOM#2 7-22
3544	R37-	73	1	-2	-2	MIXED FILL	IN	RM3		SOFT	E	FPK	3543	3570	3547	3531	7 6	E-	SETL	5000BC	1	ROOM#2 7-22
3519	R37-	73		12		UNDIF.FILL	NONE			ASHY	E	FPK	----	----	3513	3514	8	-	SETL	5500BC	1	OCCP.DEBRIS ?
3521	R37-	73		10		UNDIF.FILL	NONE			HARD	E	FPK	----	----	3514	3520	8	-	SETL	5500BC	1	OCCP.DEBRIS ?
3522	R37-	73		16		NAT.DEP.	NONE			WATER	E	FPK	----	----	3505	3525	8	-	SETL	5500BC	1	WATER DEP. 7-7
3525	R37-	73		15		NAT.DEP.	NONE			WATER	E	FPK	----	----	3522	3513	8	-	SETL	5500BC	1	NATRL.SILT 7-7
3526	R37-	73		21		NAT.DEP.	NONE			RUBBLE	E	FPK	----	----	3527	3529	8	-	SETL	5500BC	1	GRAVELS 7-7
3527	R37-	73		22		NAT.DEP.	NONE			WATER	E	FPK	----	----	----	3526	8	-	SETL	5500BC	1	NATRL.SILT 7-8
3529	R37-	73		19		NAT.DEP.	NONE			WATER	E	FPK	----	----	3526	3530	8	-	SETL	5500BC	1	FINE SILT 7-7
3530	R37-	73		18		NAT.DEP.	NONE			WATER	E	FPK	----	----	3529	3505	8	-	SETL	5500BC	1	WATER DEP. 7-8
3503	R37-	73		N-1		UNDIF.FILL	NONE			??	G	FPK	----	3513	3522	3519	8	-	SETL	5500BC	1	CUL+NONCUL 7-3
3512	R37-	73		N-1	N-2	UNDIF.FILL	NONE			??	G	FPK	----	3513	3505	3519	8	-	SETL	5500BC	1	CULT+NONCULT ?
3505	R37-	73		N-3		NAT.DEP.	NONE			WATER	E	FPK	3505	----	3530	3522	8	-	SETL	5500BC	1	NATRL SILT 7-3
3517	R37-	73		17		NAT.DEP.	NONE			WATER	E	FPK	3505	----	3530	3522	8	-	SETL	5500BC	1	NATRL SILT ?
3524	R37-	73		17		NAT.DEP.	NONE			WATER	E	FPK	3505	----	3530	3522	8	-	SETL	5500BC	1	NATRL.SILT 7-7
3513	R37-	73		14		UNDIF.FILL	NONE			SOFT	E	FPK	3513	----	3525	3519	8	-	SETL	5500BC	1	CULTURAL 7-5
3528	R37-	73		14		UNDIF.FILL	NONE			SOFT	E	FPK	3513	----	3525	3519	8	-	SETL	5500BC	1	CULTURAL 7-7
3514	R37-	73		11		UNDIF.FILL	NONE			ASHY	E	FPK	3514	----	3519	3521	8	-	SETL	5500BC	1	OCCP.DEBRIS ?
3523	R37-	73		11		UNDIF.FILL	NONE			ASHY	E	FPK	3514	----	3519	3521	8	-	SETL	5500BC	1	ON SURFACE 7-7

APPENDIX 3-C

EXCAVATION UNITS SORTED BY FIELD DESIGNATIONS

See Appendix 1 for explantation of abbreviations

LOC	SQR	YR	TT	STR	FEA	FLR/FL/FTR	INX	ICX	ECX	FILL	Q	REC	SAME	CTMN	EARL	LATE	PERIOD	--PERIOD	SITE	DATE	C	COMMENT
3733	-A	75		11		ROOM FILL	ASSC			SOFT	G	PK	3706	----	3734	----	4 C 1-		MONU	3200BC	1	UPPR.FILL 8-10
3724	-A	75		11		ROOM FILL	ASSC			SOFT	G	DRY	3706	----	3734	----	4 C 1-		MONU	3200BC	1	UPPER FILL 8-9
3715	-A	75		11		ROOM FILL	ASSC			SOFT	G	PK	3706	----	3759	----	4 C 1-		MONU	3200BC	1	W.SIDE 8-7
3718	-A	75		11		ROOM FILL	ASSC			SOFT	G	PK	3706	----	3759	----	4 C 1-		MONU	3200BC	1	UPPER FILL 8-7
3767	-A	75		11		ROOM FILL	ASSC			SOFT	G	DRY	3706	----	----	----	4 C 1-		MONU	3200BC	1	MIXD.FILL 8-17
3732	-A	75		11	-2	FLR.+ABOVE	IN	RM1		??	E	PK	3704	----	3721	3706	4 C 2-		MONU	3200BC	1	RM#1 UPR 8-10
3745	-A	75		11	-3	FLR.+ABOVE	OUT		CORT	??	E	PK	3712	----	3746	3706	4 C 2-		MONU	3200BC	1	CRT#C UPR 8-12
3749	-A	75		11	-3	FLR.+ABOVE	OUT		CORT	??	E	DRY	3712	----	3746	3706	4 C 2-		MONU	3200BC	1	CRT#C UPR 8-12
3737	-A	75		11	-3	FLR.+ABOVE	OUT		CORT	??	E	DRY	3712	----	3746	3706	4 C 2-		MONU	3200BC	1	CRT#C UPR 8-11
3738	-A	75		11	-3	FLR.+ABOVE	OUT		CORT	??	E	PK	3712	----	3746	3706	4 C 2-		MONU	3200BC	1	CRT#C UPR 8-11
3719	-A	75		11	-3	FLR.+ABOVE	OUT		CORT	??	E	PK	3712	----	3746	3706	4 C 2-		MONU	3200BC	1	CRT#C UPR 8-7
3764	-A	75		11	-5	FLR.+ABOVE	OUT		OP-N	??	G	DRY	3759	----	----	3706	4 C 2-		MONU	3200BC	1	W.SIDE#B 8-16
3759	-A	75		11	-5	FLR.+ABOVE	OUT		OP-N	??	G	PK	3759	----	----	3706	4 C 2-		MONU	3200BC	1	W.SIDE#B 8-14
3762	-A	75		11	-5	FLR.+ABOVE	OUT		OP-N	??	G	PK	3759	----	----	3706	4 C 2-		MONU	3200BC	1	W.SIDE#B 8-16
3763	-A	75		11	-5	FLR.+ABOVE	OUT		OP-N	??	G	DRY	3759	----	----	3706	4 C 2-		MONU	3200BC	1	W.SIDE#B 8-14
3734	-A	75		11	-6	FLR.+ABOVE	IN	RM1		??	E	PK	----	----	3751	3706	4 C 2-		MONU	3200BC	1	RM#D UPR 8-10
3742	-A	75		11	-7	ROOM FILL	IN	RM?		??	G	PK	----	----	3758	3706	4 C 2-		MONU	3200BC	1	RM#E 8-11
3758	-A	75		11	-7A	IM.AB.FLR.	IN	RM2		ASHY	E	PK	----	----	3770	3742	4 C 2-		MONU	3200BC	1	RM#E UPR 8-14
3766	-A	75		11	-8	FLR.+ABOVE	OUT		OP-N	??	G	PK	3755	----	----	3706	4 C 2-		MONU	3200BC	1	AREA#A 8-16
3765	-A	75		11	-8	FLR.+ABOVE	OUT		OP-N	??	G	DRY	3755	----	----	3706	4 C 2-		MONU	3200BC	1	AREA#A 8-16
3755	-A	75		11	-8	FLR.+ABOVE	OUT		OP-N	??	G	DRY	3755	----	----	3706	4 C 2-		MONU	3200BC	1	AREA#A 8-13
3757	-A	75		11	-9	DRAIN	OUT		OP-N	??	E	PK	----	3755	----	3706	4 C 2-		MONU	3200BC	1	DRAIN FILL8-14
3736	-A	75		11	2A	IM.AB.FLR.	IN	RM1		??	E	PK	3721	----	3709	3704	4 C 2-		MONU	3200BC	1	RM#1 MID 8-10
3721	-A	75		11	2A	IM.AB.FLR.	IN	RM1		??	E	PK	3721	----	3709	3704	4 C 2-		MONU	3200BC	1	ROOM#1 MID 8-9
3743	-A	75		11	2B	IM.AB.FLR.	IN	RM1		??	E	PK	3709	----	----	3721	4 C 2-		MONU	3200BC	1	RM#1 LWR 8-11
3728	-A	75		11	2B	IM.AB.FLR.	IN	RM1		??	E	PK	3709	----	----	3721	4 C 2-		MONU	3200BC	1	RM#1 LWR 8-10
3722	-A	75		11	2B	IM.AB.FLR.	IN	RM1		??	E	PK	3709	----	----	3721	4 C 2-		MONU	3200BC	1	ROOM#1 LWR 8-9
3750	-A	75		11	3A	IM.AB.FLR.	?IN		CORT	??	E	PK	3746	----	----	3712	4 C 2-		MONU	3200BC	1	CRT#C LWR 8-13
3752	-A	75		11	3A	IM.AB.FLR.	OUT		CORT	??	E	DRY	3746	----	----	3712	4 C 2-		MONU	3200BC	1	CRT#C LWR 8-13
3753	-A	75		11	3A	IM.AB.FLR.	OUT		CORT	??	E	DRY	3746	----	----	3712	4 C 2-		MONU	3200BC	1	CRT#C LWR 8-13
3746	-A	75		11	3A	IM.AB.FLR.	OUT		CORT	??	E	PK	3746	----	----	3712	4 C 2-		MONU	3200BC	1	CRT#C LWR 8-12
3761	-A	75		11	3A	IM.AB.FLR.	OUT		CORT	??	E	PK	3746	----	----	3712	4 C 2-		MONU	3200BC	1	CRT#C LWR 8-14
3756	-A	75		11	3A	IM.AB.FLR.	OUT		CORT	??	E	DRY	3746	----	----	3712	4 C 2-		MONU	3200BC	1	CRT#C LWR 8-14
3751	-A	75		11	6A	IM.AB.FLR.	IN	RM1		??	E	PK	----	----	----	3734	4 C 2-		MONU	3200BC	1	RM#D LWR 8-13
3770	-A	75		11	7B	UNDIF.FILL	IN	RM2		??	E	PK	----	----	----	3758	4 C 2-		MONU	3200BC	1	RM#E LWR. 8-16
3707	-A	75	7	11		ROOM FILL	ASSC			SOFT	G	DRY	3706	----	3704	----	4 C 1-		MONU	3200BC	1	UPPER FILL 8-5
3706	-A	75	7	11		ROOM FILL	ASSC			SOFT	G	PK	3706	----	3704	----	4 C 1-		MONU	3200BC	1	UPPER FILL 8-5
3711	-A	75	7	11	-2	FLR.+ABOVE	IN	RM1		??	E	PK	3704	----	3721	3706	4 C 2-		MONU	3200BC	1	ROOM#1 UPR 8-6
3704	-A	75	7	11	-2	FLR.+ABOVE	IN	RM1		??	E	DRY	3704	----	3721	3706	4 C 2-		MONU	3200BC	1	ROOM#1 UPR 8-6
3712	-A	75	7	11	-3	FLR.+ABOVE	OUT		CORT	??	E	PK	3712	----	3746	3706	4 C 2-		MONU	3200BC	1	CRT#C UPR 8-6
3713	-A	75	7	11	-3	FLR.+ABOVE	OUT		CORT	??	E	DRY	3712	----	3746	3706	4 C 2-		MONU	3200BC	1	CRT#C UPR 8-6
3709	-A	75	7	11	2B	IM.AB.FLR.	IN	RM1		??	E	DRY	3709	----	----	3721	4 C 2-		MONU	3200BC	1	ROOM#1 LWR 8-6
3710	-A	75	7	11	2B	IM.AB.FLR.	IN	RM1		??	E	PK	3709	----	----	3721	4 C 2-		MONU	3200BC	1	ROOM#1 LWR 8-6
3768	-A	75	8	12		UNDIF.FILL	??			??	F	PK	----	----	3769	3755	4 C	- 6	SETL	3200BC	1	MIXED 8-19
3769	-A	75	8	13		PLATFORM	??			BRICK	G	PK	----	----	3771	3768	6 -		SETL	4500BC	1	BV-RM.BWL 8-19
3771	-A	75	8	14		PLATFORM	??			BRICK	E	PK	----	----	3772	3769	6 -		SETL	4500BC	1	BV-RM.BWL 8-19
3772	-A	75	8	15		UNDIF.FILL	??			SFT/BK	G	PK	----	----	----	3771	6 -		SETL	4500BC	1	BV-RM.BWL 8-19
0289	-B	70		20		FLR.+ABOVE	IN	RM3		??	G	PK	----	----	----	----	4 C 2-		MONU	3200BC	1	ROOM#5 6-17-71
0282	-B	71		-4	-6	PLATFORM	IN	SPEC		GEL	E	PK	----	0301	0279	----	4 C 1-		MONU	3200BC	1	R.4 ?STRG 6-19
0308	-B	71		-4	-8	FLR.+ABOVE	IN	SPEC		??	E	PK	0302	0279	0294	0301	4 C 1-		MONU	3200BC	1	R.4 ?STRG 8-2
0302	-B	71		-4	-8	FLR.+ABOVE	IN	SPEC		??	E	PK	0302	0279	0294	0301	4 C 1-		MONU	3200BC	1	R.4 ?STRG 6-21
0278	-B	71		-4	-9	FLR.+ABOVE	IN	??		HARD	E	PK	----	----	----	----	4 C 1-		MONU	3200BC	1	E.OF RM.4 6-23
0279	-B	71		-4	10	FLR.+ABOVE	IN	SPEC		??	E	PK	----	0302	0304	0282	4 C 1-		MONU	3200BC	1	R.3 ?STRG 6-24
0294	-B	71		-5	-1	FLR.+ABOVE	IN	SPEC		??	E	PK	----	0304	----	0302	4 C 2-		MONU	3200BC	1	R.4 ?STRG 6-21
0304	-B	71		-6		MIXED FILL	ASSC			SFT/BK	F	PK	----	----	----	0279	4 C	- 5 A	SETL	3200BC	1	RM.4 AREA 6-27
0306	-B	71		-8A		LEVELLING	ASSC			BRICK	E	PK	----	----	----	----	4 C 1-	4 B 6	MONU	3200BC	1	AREA 2 8-2
0305	-B	71		11	12	ROOM FILL	IN	SPEC		SOFT	G	PK	----	0280	0295	----	4 C 1-		MONU	3200BC	1	RM.6 WELL 6-30
0295	-B	71		13		IM.AB.FLR.	IN	SPEC		SOFT	E	PK	----	----	0327	0305	4 C 2-		MONU	3200BC	1	RM.6 WELL 7-1
0327	-B	71		13	3-4	IN FLOORS	IN	SPEC		BURNED	G	PK	----	----	0325	0295	4 C 2-		MONU	3200BC	1	RM.6 WELL 8-3
0325	-B	71		15		FLR.+ABOVE	NONE			SOFT	G	FPK	----	----	0333	----	4 C	- 5 A 1	SETL	3200BC	1	VA-1VC 8-3
0335	-B	71		17		IM.AB.FLR.	NONE			HARD	E	FPK	0335	----	0329	0325	5 A 1-		SETL	3500BC	1	COURT 16 8-4
0333	-B	71		18		IM.AB.FLR.	NONE			HARD	E	FPK	0335	----	0329	0325	5 A 1-		SETL	3500BC	1	COURT 16 8-4
0329	-B	71		18	-1	ON FLOOR	NONE			HARD	E	FPK	----	----	0332	0335	5 A 1-		SETL	3500BC	1	COURT 16 8-4
0332	-B	71		19		IN FLOORS	NONE			SOFT	G	FPK	----	----	0323	0329	5 A 1-		SETL	3500BC	1	B.71.19+21 8-4
0331	-B	71		20		UNDIF.FILL	NONE			SOFT	E	FPK	----	----	0310	0329	5 A 1-		SETL	3500BC	1	COURT 16 8-4
0310	-B	71		21		UNDIF.FILL	NONE			SOFT	G	FPK	----	----	0323	0331	5 A 1-		SETL	3500BC	1	COURT 16 8-?
0323	-B	71		22		FLR.+ABOVE	NONE			SOFT	E	FPK	----	1323	0313	0310	5 A 2-		SETL	3500BC	1	COURT 5 8-7
0313	-B	71		22	-1	IN FLOORS	NONE			HARD	E	FPK	----	1322	0316	0323	5 A 2-		SETL	3500BC	1	COURT 5 8-8
0316	-B	71		23		IN FLOORS	NONE			SFT/BK	G	FPK	0316	1341	0318	0313	5 B -		SETL	3800BC	1	UP.VB DEP.8-7
0321	-B	71		24		IN FLOORS	NONE			SFT/BK	G	FPK	0316	1341	0318	0313	5 B -		SETL	3800BC	1	UP.VB DEP.8-8
0318	-B	71		25		IN FLOORS	OUT		CORT	HARD	G	FPK	----	----	0317	0321	5 B -		DOMS	3800BC	1	COURT 16 8-9
0317	-B	71		26		IN FLOORS	OUT		CORT	HARD	G	FPK	----	----	0315	0318	5 B -		DOMS	3800BC	1	COURT 16 8-9
0315	-B	71		27		IN FLOORS	OUT		CORT	SOFT	G	FPK	----	----	0319	0317	5 B -		DOMS	3800BC	1	COURT 16 8-9
0319	-B	71		27	-1	IN FLOORS	OUT		CORT	HARD	E	FPK	----	----	0312	0315	5 B -		DOMS	3800BC	1	COURT 16 8-10
0312	-B	71		27	-2	IN FLOORS	OUT		CORT	??	G	FPK	----	----	0320	0319	5 B -		DOMS	3800BC	1	COURT 16 8-10
0320	-B	71		27	3-5	IN FLOORS	NONE			HARD	G	PK	----	----	0311	0312	5 B	- 5 C	SETL	3800BC	1	8-10
0311	-B	71		28		UNDIF.FILL	NONE			SFT/BK	E	PK	----	----	0314	0320	5 C -		SETL	4000BC	1	8-11
0314	-B	71		29		UNDIF.FILL	NONE			SFT/BK	E	PK	----	1370	0322	0311	5 C -		SETL	4000BC	1	8-10
0322	-B	71		29	-1	FLR.+ABOVE	NONE			BRICK	G	PK	----	----	1369	0314	5 C -		SETL	4000BC	1	8-12
0286	-B	71		6-9		ROOM FILL	ASSC			??	F	PK	----	----	----	----	4 C 2-	4 C 1	MONU	3200BC	1	MIXED 6,8,9
0296	-B	71	1	-1		ROOM FILL	IN	SPEC		SFT/BK	G	PK	----	0280	----	----	4 C 1-		MONU	3200BC	1	RM.6 WELL 6-16
0301	-B	71	2	-2		PLATFORM	IN	SPEC		GEL	E	PK	----	0282	0302	----	4 C 1-		MONU	3200BC	1	R.4 ?STRG 6-19
1317	-B	73		-2		FLR.+ABOVE	NONE			ASHY	G	FPK	1314	0325	1320	----	5 A 1-		SETL	3500BC	1	COURT 16 7-14
1318	-B	73		-2		FLR.+ABOVE	NONE			ASHY	G	FPK	1314	0325	1320	----	5 A 1-		SETL	3500BC	1	COURT 16 7-15
1314	-B	73		-2		FLR.+ABOVE	NONE			ASHY	G	FPK	1314	0325	1320	----	5 A 1-		SETL	3500BC	1	COURT 16 7-10
1315	-B	73		-2		FLR.+ABOVE	NONE			ASHY	G	FPK	1314	0325	1320	----	5 A 1-		SETL	3500BC	1	COURT 16 7-11
1316	-B	73		-2		FLR.+ABOVE	NONE			ASHY	G	FPK	1314	0325	1320	----	5 A 1-		SETL	3500BC	1	COURT 16 7-12
1335	-B	73		-3		FLR.+ABOVE	NONE			ASHY	G	FPK	1320	----	1326	1314	5 A 1-		SETL	3500BC	1	COURT 16 7-25
1320	-B	73		-3		FLR.+ABOVE	NONE			ASHY	G	FPK	1320	----	1326	1314	5 A 1-		SETL	3500BC	1	COURT 16 7-17
1321	-B	73		-3		FLR.+ABOVE	NONE			ASHY	G	FPK	1320	----	1326	1314	5 A 1-		SETL	3500BC	1	COURT 16 7-16
1326	-B	73		-3	-4	UNDIF.FILL	NONE			RUBBLE	G	FPK	----	----	1337	1320	5 A 1-		SETL	3500BC	1	RUBBLE 7-17
1337	-B	73		-3	-5	FLR.+ABOVE	ASSC			??	G	FPK	----	----	1323	1326	5 A 1-		SETL	3500BC	1	BETW.WALLS7-28
1336	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A 2-		SETL	3500BC	1	COURT 5 7-28
1338	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A 2-		SETL	3500BC	1	COURT 5 7-29
1339	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A 2-		SETL	3500BC	1	COURT 5 7-30
1334	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A 2-		SETL	3500BC	1	COURT 5 7-25
1333	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A 2-		SETL	3500BC	1	COURT 5 7-24
1327	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A 2-		SETL	3500BC	1	COURT 5 7-21
1329	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A 2-		SETL	3500BC	1	COURT 5 7-22
1331	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A 2-		SETL	3500BC	1	COURT 5 7-23
1323	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A 2-		SETL	3500BC	1	COURT 5 7-19
1324	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5 A 2-		SETL	3500BC	1	COURT 5 7-25

LOC	SQR	YR	TT	STR	FEA	FLR/FL/FTR	IN/X	ICX	ECX	FILL	Q	REC	SAME	CTMN	EARL	LATE	PERIOD		--PERIOD		SITE	DATE	C	COMMENT
1325	-B	73		-4		IN FLOORS	NONE			LAMIN.	G	FPK	1323	0323	1322	1337	5	A	2-		SETL	3500BC	1	COURT 5 7-18
1332	-B	73		-4	-2	IN FLOORS	NONE			WATER	G	FPK	1322	0313	1341	1323	5	A	2-		SETL	3500BC	1	COURT 5 7-23
1322	-B	73		-4	-2	IN FLOORS	NONE			WATER	G	FPK	1322	0313	1341	1323	5	A	2-		SETL	3500BC	1	COURT 5 7-19
1352	-B	73		-5		IN FLOORS	NONE			LAMIN.	G	FPK	1341	0316	1354	1322	5	B	-		SETL	3800BC	1	UP.VB DEP. 8-8
1344	-B	73		-5		IN FLOORS	NONE			LAMIN.	G	FPK	1341	0316	1354	1322	5	B	-		SETL	3800BC	1	UP.VB DEP. 8-2
1341	-B	73		-5		IN FLOORS	NONE			LAMIN.	G	FPK	1341	0316	1354	1322	5	B	-		SETL	3800BC	1	UP.VB DEP.7-31
1343	-B	73		-5		IN FLOORS	NONE			LAMIN.	G	FPK	1341	0316	1354	1322	5	B	-		SETL	3800BC	1	UP.VB DEP. 8-1
1354	-B	73		-5	-1	IM.AB.FLR.	NONE			BURNED	E	FPK	----	----	1342	1341	5	B	-		SETL	3800BC	1	UP.16 SURF.8-9
1362	-B	73		-5	-2	FLR.+ABOVE	IN	TOMB		ASHY	G	FPK	----	1341	1354	1322	5	B	-		STRC	3800BC	1	ROOM 11 8-12
1358	-B	73		-5	-4	UNDIF.FILL	NONE			HARD	G	FPK	----	----	1354	1341	5	B	-		SETL	3800BC	1	NE CORNER 8-11
1365	-B	73		-6		IN FLOORS	OUT		CORT	WATER	G	[illegible]	1342	1355	1348	1354		[illegible]	-		DOMS	3800BC	1	COURT 16 8-15
1361	-B	73		-6		IN FLOORS	OUT		CORT	WATER	G	[illegible]	1342	1355	1348	1354			-		DOMS	3800BC	1	COURT 16 8-13
1353	-B	73		-6		IN FLOORS	OUT		CORT	WATER	G	[illegible]	[illegible]	1359	1348	1354		[illegible]	-		DOMS	3800BC	1	COURT 16 8-7
1351	-B	73		-6		IN FLOORS	OUT		CORT	WATER	G	[illegible]	1342	[illegible]	1348	1354	[illegible]	B	-		DOMS	3800BC	1	COURT 16 8-6
1345	-B	73		-6		IN FLOORS	OUT		CORT	WATER	G	FPK	1342	[illegible]	[illegible]	1354	5	B	-		DOMS	3800BC	1	COURT 16 8-2
1347	-B	73		-6		IN FLOORS	OUT		CORT	WATER	G	[illegible]	1342	[illegible]	1348	1354	5	B	-		DOMS	3800BC	1	COURT 16 8-4
1342	-B	73		-6		IN FLOORS	OUT		CORT	WATER	G	FPK	1342	1355	1348	1354	5	B	-		DOMS	3800BC	1	COURT 16 8-1
1348	-B	73		-6	-2	IN FLOORS	OUT		[illegible]	WATER	G	FPK	----	----	1356	1342	5	B	-		DOMS	3800BC	1	COURT 16 8-4,5
1366	-B	73		-6	-3	DEPRESSION	NONE			ORGANC	G	FPK	1355	1342	----	1354	5	B	-		DOMS	3800BC	1	DEPRES.15 8-14
1359	-B	73		-6	-3	DEPRESSION	NONE			ORGANC	G	FPK	1355	1342	----	1354	5	B	-		DOMS	3800BC	1	DEPRES.15 8-11
1357	-B	73		-6	-3	DEPRESSION	NONE			ORGANC	G	FPK	1355	1342	----	1354	5	B	-		DOMS	3800BC	1	DEPRES.15 8-12
1355	-B	73		-6	-3	DEPRESSION	NONE			ORGANC	G	FPK	1355	1342	----	1354	5	B	-		DOMS	3800BC	1	DEPRES.15 8-9
1360	-B	73		-6	-4	IN FLOORS	OUT		CORT	WATER	G	FPK	1356	----	1368	1348	5	B	-		DOMS	3800BC	1	8-13
1356	-B	73		-6	-4	IN FLOORS	OUT		CORT	WATER	G	FPK	1356	----	1368	1348	5	B	-		DOMS	3800BC	1	COURT 16 8-12
1368	-B	73	1	-1		UNDIF.FILL	NONE			SOFT	G	FPK	----	----	1367	1356	5	B	-		SETL	3800BC	1	8-15
1367	-B	73	1	-1	-1	IN FLOORS	NONE			WATER	G	FPK	----	----	1370	1368	5	B	-		SETL	3300BC	1	8-16
1372	-B	73	1	-2		UNDIF.FILL	NONE			ASHY	G	PK	1370	0314	1369	0770	5	C	-		SETL	4000BC	1	8-18
1370	-B	73	1	-2		UNDIF.FILL	NONE			ASHY	G	PK	1370	0314	1369	0770	5	C	-		SETL	4000BC	1	8-16
1369	-B	73	1	-3		FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	1369	----	----	1370	5	C	-		DOMS	4000BC	1	WALL FALL 8-16
1371	-B	73	1	-3		FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	1369	----	----	1370	5	C	-		DOMS	4000BC	1	WALL FALL 8-18
1373	-B	73	1	-3	-1	MIDDEN	NONE			SOFT	G	PK	1373	----	1376	----	7	A	-		SETL	5000BC	1	8-18
1374	-B	73	1	-3	-1	MIDDEN	NONE			SOFT	G	PK	1373	----	1376	----	7	A	-		SETL	5000BC	1	8-19
1375	-B	73	1	-3	-1	MIDDEN	NONE			SOFT	G	PK	1373	----	1376	----	7	A	-		SETL	5000BC	1	8-20
1376	-B	73	1	-3	-5	MIDDEN	NONE			ORGANC	G	PK	----	----	----	1373	7	A	-		SETL	5000BC	1	8-18
0377	-BC-	71		28		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	0337	0399	----	----	4	C	1-		MONU	3200BC	1	AREA G 7-12
0337	-BC-	71		28		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	0337	0399	----	----	4	C	1-		MONU	3200BC	1	AREA G 7-13
0342	-BC-	71		28		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	0337	0399	----	----	4	C	1-		MONU	3200BC	1	AREA G 7-14
0355	-BC-	71		28		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	0337	0399	----	----	4	C	1-		MONU	3200BC	1	AREA G 7-13
0362	-BC-	71		28	-1	SHAPED PIT	OUT		OP-N	??	E	PK	0360	0337	----	----	4	C	1-		MONU	3200BC	1	FROM 28 7-14
0360	-BC-	71		28	-1	SHAPED PIT	OUT		OP-N	??	E	PK	0360	0337	----	----	4	C	1-		MONU	3200BC	1	FROM 28 7-13
0783	-C	69		-S	-5	UNSHAP.PIT	NONE			SOFT	P	PK	----	0703	----	----	4	B	- 6 A		SETL	2500BC	1	PIT8 6/30-7/2
0775	-C	69		-S	-6	FOUNDATION	ASSC			RUBBLE	P	PK	0739	----	0726	----	4	C	- 5		MONU	3200BC	1	IVC DITCH 7-2
0864	-C	69		-S	-8	UNDIF.FILL	NONE			RUBBLE	F	PK	0726	----	----	----	5	A	- 5 C		SETL	3500BC	1	MIXD VC-A 8-4
0736	-C	69		-S	-8	UNDIF.FILL	NONE			RUBBLE	F	PK	0726	----	----	----	5	A	- 5 C		SETL	3500BC	1	MIXD VC-A ?
0777	-C	69		-1		UNDIF.FILL	NONE			BRICK	F	PK	0702	0716	0743	----	5	A	1- 5 B		SETL	3500BC	1	MXD.VA-B 6-23
0742	-C	69		-1		UNDIF.FILL	NONE			BRICK	F	PK	0702	0716	0743	----	5	A	1- 5 B		SETL	3500BC	1	MXD.VA-B 6-21
0733	-C	69		-1		UNDIF.FILL	NONE			BRICK	F	PK	0702	0716	0743	----	5	A	1- 5 B		SETL	3500BC	1	MXD.VA-B 6-24
0702	-C	69		-1		UNDIF.FILL	NONE			BRICK	F	PK	0702	0716	0743	----	5	A	1- 5 B		SETL	3500BC	1	MXD.VA-B 6-19
0865	-C	69		-1	-4	LEVELLING	ASSC			RUBBLE	E	PK	0796	0714	----	----	6	A	-		SETL	4500BC	1	RUBBLE 4 8-4
0810	-C	69		-1	-4	LEVELLING	ASSC			RUBBLE	E	PK	0796	0714	----	----	6	A	-		SETL	4500BC	1	RUBBLE 4 6-26
0802	-C	69		-1	-4	LEVELLING	ASSC			RUBBLE	E	PK	0796	0714	----	----	6	A	-		SETL	4500BC	1	RUBBLE 4 6-25
0796	-C	69		-1	-4	LEVELLING	ASSC			RUBBLE	E	PK	0796	0714	----	----	6	A	-		SETL	4500BC	1	RUBBLE 4 6-24
0834	-C	69		-1	-7	FLR.+ABOVE	IN	RM2		BRICK	G	FPK	0735	0743	1306	1342	5	B	-		DOMS	3800BC	1	ROOM 2 6-14
0809	-C	69		-1	-7	FLR.+ABOVE	IN	RM2		BRICK	G	FPK	0735	0743	1306	1342	5	B	-		DOMS	3800BC	1	ROOM 2 6-22
0741	-C	69		-1	-7	FLR.+ABOVE	IN	RM2		BRICK	G	FPK	0735	0743	1306	1342	5	B	-		DOMS	3800BC	1	ROOM 2 6-18
0735	-C	69		-1	-7	FLR.+ABOVE	IN	RM2		BRICK	G	FPK	0735	0743	1306	1342	5	B	-		DOMS	3800BC	1	ROOM 2 7-5
0858	-C	69		-1	-9	LEVELLING	ASSC			RUBBLE	E	PK	0714	0796	----	----	6	A	-		SETL	4500BC	1	RUBBLE 4 8-6
0853	-C	69		-1	-9	LEVELLING	ASSC			RUBBLE	E	PK	0714	0796	----	----	6	A	-		SETL	4500BC	1	RUBBLE 4 6-30
0721	-C	69		-1	-9	LEVELLING	ASSC			RUBBLE	E	PK	0714	0796	----	----	6	A	-		SETL	4500BC	1	RUBBLE 4 8-2
0714	-C	69		-1	-9	LEVELLING	ASSC			RUBBLE	E	PK	0714	0796	----	----	6	A	-		SETL	4500BC	1	RUBBLE 4 6-28
0772	-C	69		-1	2-3	FLR.+ABOVE	IN	RM1		BRICK	G	FPK	0743	0735	1306	1342	5	B	-		DOMS	3800BC	1	ROOM 1 6-28
0743	-C	69		-1	2-3	FLR.+ABOVE	IN	RM1		BRICK	G	FPK	0743	0735	1306	1342	5	B	-		DOMS	3800BC	1	ROOM 1 6-21
0773	-C	69		-1	9A	LEVELLING	ASSC			RUBBLE	G	PK	----	----	----	0714	6	A	-		SETL	4500BC	1	PROB.CONTXT8-7
0857	-C	69		-3		PLATFORM	NONE			BRICK	G	PK	0770	0807	0740	0735	5	C	-		SETL	4000BC	1	PAVING 8-4
0791	-C	69		-3		PLATFORM	NONE			BRICK	G	PK	0770	0807	0740	0735	5	C	-		SETL	4000BC	1	PAVING 7-14
0770	-C	69		-3		PLATFORM	NONE			BRICK	G	PK	0770	0807	0740	0735	5	C	-		SETL	4000BC	1	PAVING 7-24
0812	-C	69		-4		WALLS	ASSC			BRICK	F	PK	----	----	----	0714	6	A	-		SETL	4500BC	1	RET.WALLS 6-28
0807	-C	69		-5		PLATFORM	NONE			BRICK	G	PK	----	0770	0740	0735	5	C	-		SETL	4000BC	1	6-29
0861	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5	C	- 6 B	1	SETL	4000BC	1	MIXED 8-10
0846	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5	C	- 6 B	1	SETL	4000BC	1	MIXED 7-15
0819	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5	C	- 6 B	1	SETL	4000BC	1	MIXED 7-28
0797	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5	C	- 6 B	1	SETL	4000BC	1	MIXED 7-29
0799	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5	C	- 6 B	1	SETL	4000BC	1	MIXED 8-3
0789	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5	C	- 6 B	1	SETL	4000BC	1	MIXED 7-27
0782	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5	C	- 6 B	1	SETL	4000BC	1	MIXED 7-30
0776	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5	C	- 6 B	1	SETL	4000BC	1	MIXED 7-26
0761	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5	C	- 6 B	1	SETL	4000BC	1	MIXED 7-16
0722	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5	C	- 6 B	1	SETL	4000BC	1	MIXED 8-2
0715	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5	C	- 6 B	1	SETL	4000BC	1	MIXED 7-24
0712	-C	69		-7		MIXED FILL	NONE			BRICK	F	PK	0712	----	----	0770	5	C	- 6 B	1	SETL	4000BC	1	MIXED 7-17
0801	-C	69		-7	-2	FLR.+ABOVE	IN	RM1		BRICK	G	PK	----	0700	0698	0740	5	C	-		DOMS	4000BC	1	ROOM 3 7-30
0874	-C	69		-7	-3	FLR.+ABOVE	IN	RM1		BRICK	G	PK	----	0700	0698	0740	5	C	-		DOMS	4000BC	1	ROOM 4 7-31
0769	-C	69		-7	-4	FLR.+ABOVE	IN	RM1		BRICK	G	PK	----	0700	0698	0740	5	C	-		DOMS	4000BC	1	ROOM 14 7-31
0808	-C	69		-7	-7	FLR.+ABOVE	IN	RM3		BRICK	G	PK	----	0700	0698	0740	5	C	-		DOMS	4000BC	1	ROOM 12 7-31
0844	-C	69		-7	-9	FLR.+ABOVE	IN	RM1		BRICK	G	PK	0844	0700	0698	0740	5	C	-		DOMS	4000BC	1	ROOM 1 7-22
0756	-C	69		-7	10	FLR.+ABOVE	IN	RM1		BRICK	G	PK	0844	0700	0698	0740	5	C	-		DOMS	4000BC	1	ROOM 1 7-21
0758	-C	69		-7	10	FLR.+ABOVE	IN	RM1		BRICK	G	PK	0844	0700	0698	0740	5	C	-		DOMS	4000BC	1	ROOM 1 7-22
0768	-C	69		-7	11	FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	----	0700	0698	0740	5	C	-		DOMS	4000BC	1	OUTSIDE 7-21
0873	-C	69		-7	12	HEARTH	IN	RM1		BURNED	E	FPK	0844	0700	0698	0740	5	C	-		DOMS	4000BC	1	HEARTH A 7-23
0700	-C	69		-7	13	FLR.+ABOVE	IN	RM1		BRICK	G	PK	----	1912	0698	0740	5	C	-		DOMS	4000BC	1	ROOM 10 7-31
0872	-C	69		-7	14	IM.AB.FLR.	IN	RM1		BRICK	E	PK	----	0700	0698	0740	5	C	-		DOMS	4000BC	1	ROOM 6 7-30
0811	-C	69		-7	17	FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	----	0700	0698	0740	5	C	-		DOMS	4000BC	1	OUTSIDE 7-27
0779	-C	69		-7	20	LEVELLING	NONE			RUBBLE	E	PK	----	----	----	0820	6	B	2-		SETL	4500BC	1	6-29
0825	-C	69		7A		UNDIF.FILL	NONE			BRICK	G	PK	0820	1349	0779	----	6	B	1-		SETL	4500BC	1	8-9
0820	-C	69		7A		UNDIF.FILL	NONE			BRICK	G	PK	0820	1349	0779	----	6	B	1-		SETL	4500BC	1	8-10
0788	-C	69	1	-1		UNDIF.FILL	NONE			BRICK	F	PK	0716	0702	0743	----	5	A	1- 5 B		SETL	3500BC	1	MXD.VA-B 6-9
0774	-C	69	1	-1		UNDIF.FILL	NONE			BRICK	F	PK	0716	0702	0743	----	5	A	1- 5 B		SETL	3500BC	1	MXD.VA-B 6-10
0716	-C	69	1	-1		UNDIF.FILL	NONE			BRICK	F	PK	0716	0702	0743	----	5	A	1- 5 B		SETL	3500BC	1	MXD.VA-B 6-8
0709	-C	69	1	-2	-4	LEVELLING	ASSC			RUBBLE	E	PK	----	0796	----	----	6	A	-		SETL	4500BC	1	RUBBLE 4 6-12
0755	-C	69	1	-3		PLATFORM	NONE			BRICK	G	PK	0770	0807	0740	0735	5	C	-		SETL	4000BC	1	PAVING 6-12
0710	-C	69	2	-S	-7	WALLS	ASSC			BRICK	F	FPK	----	----	0807	1342	5	B	-		DOMS	3800BC	1	WALL 5 7-8
0863	-C	69	2	-S	-8	UNDIF.FILL	NONE			RUBBLE	F	PK	0726	----	----	----	5	A	- 5 C		SETL	3500BC	1	MIXD VC-A 7-10

LOC	SQR	YR	TT	STR	FEA	FLR/FL/FTR	IN/X	ICX	ECX	FILL	Q	REC	SAME	CTMN	EARL	LATE	PERIOD	--PERIOD		SITE	DATE	C	COMMENT
0752	-C	69	2	-5	-8	UNDIF.FILL	NONE			RUBBLE	F	PK	0726	----	----	----	5 A	- 5 C		SETL	3500BC	1	MIXD VC-A 7-12
0726	-C	69	2	-5	-8	UNDIF.FILL	NONE			RUBBLE	F	PK	0726	----	----	----	5 A	- 5 C		SETL	3500BC	1	MIXD VC-A 7-9
0760	-C	69	2	-1		ROOM FILL	ASSC			BRICK	G	PK	0740	----	0700	0770	5 C	-		DOMS	4000BC	1	7-12
0740	-C	69	2	-1		ROOM FILL	ASSC			BRICK	G	PK	0740	----	0700	0770	5 C	-		DOMS	4000BC	1	7-13
0848	-C	69	3	-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0698	0699	0729	----	6 A	-		SETL	4500BC	1	UNDER VC 8-13
0698	-C	69	3	-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0698	0699	0729	----	6 A	-		SETL	4500BC	1	UNDER VC 8-14
0703	-C	70		-5	-1	UNSHAP.PIT	NONE			SOFT	P	PK	----	0783	----	----	4 B	- 6 A		SETL	2500BC	1	PIT 8 6-22
0759	-C	70		-5	-2	FLR.+ABOVE	IN	RM1		BRICK	G	PK	----	0700	0698	0740	5 C	-		DOMS	4000BC	1	SOUTH RMS 6-23
0843	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6 A	- 7 A		SETL	4500BC	1	MIXED 7-11
0795	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6 A	- 7 A		SETL	4500BC	1	MIXED 7-6
0792	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6 A	- 7 A		SETL	4500BC	1	MIXED 6-29
0747	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6 A	- 7 A		SETL	4500BC	1	MIXED ?
0748	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6 A	- 7 A		SETL	4500BC	1	MIXED ?
0728	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6 A	- 7 A		SETL	4500BC	1	MIXED 7-5
0719	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6 A	- 7 A		SETL	4500BC	1	MIXED 7-1
0704	-C	70		-1		MIXED FILL	NONE			BRICK	F	PK	0704	----	----	----	6 A	- 7 A		SETL	4500BC	1	MIXED 6-28
0856	-C	70		-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0699	0698	0729	----	6 A	-		SETL	4500BC	1	UNDER VC 7-9
0849	-C	70		-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0699	0698	0729	----	6 A	-		SETL	4500BC	1	UNDER VC 6-28
0745	-C	70		-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0699	0698	0729	----	6 A	-		SETL	4500BC	1	UNDER VC 7-4,7
0731	-C	70		-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0699	0698	0729	----	6 A	-		SETL	4500BC	1	UNDER VC 6-25
0720	-C	70		-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0699	0698	0729	----	6 A	-		SETL	4500BC	1	UNDER VC 6-24
0705	-C	70		-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0699	0698	0729	----	6 A	-		SETL	4500BC	1	UNDER VC ?
0699	-C	70		-1	-1	LEVELLING	NONE			RUBBLE	E	PK	0699	0698	0729	----	6 A	-		SETL	4500BC	1	UNDER VC 6-27
0805	-C	70		-1	-2	LEVELLING	ASSC			RUBBLE	E	PK	0729	----	0746	0699	6 A	-		SETL	4500BC	1	RUBBLE 14 ?
0729	-C	70		-1	-2	LEVELLING	ASSC			RUBBLE	E	PK	0729	----	0745	0699	6 A	-		SETL	4500BC	1	RUBBLE 14 6-30
0806	-C	70		-1	16	PLATFORM	ASSC			BRICK	G	PK	0708	0821	----	----	6 B	2-		SETL	4500BC	1	UP.PVG.2 7-13
0784	-C	70		-1	16	PLATFORM	ASSC			BRICK	G	PK	0708	0821	----	----	6 B	2-		SETL	4500BC	1	UP.PVG.2 7-14
0766	-C	70		-1	16	PLATFORM	ASSC			BRICK	G	PK	0708	0821	----	----	6 B	2-		SETL	4500BC	1	UP.PVG.2 7-15
0708	-C	70		-1	16	PLATFORM	ASSC			BRICK	G	PK	0708	0821	----	----	6 B	2-		SETL	4500BC	1	UP.PVG.2 7-11
0851	-C	70		-2		UNDIF.FILL	NONE			??	G	PK	0746	1914	0727	0729	6 B	1-		SETL	4500BC	1	7-1
0746	-C	70		-2		UNDIF.FILL	NONE			??	G	PK	0746	1914	0727	0729	6 B	1-		SETL	4500BC	1	7-2
0727	-C	70		-3	-1	DRAIN	ASSC			RUBBLE	E	PK	----	0167	0785	----	6 B	1-		SETL	4500BC	1	7-13
0866	-C	70		1A		UNDIF.FILL	ASSC			BRICK	G	PK	0737	0174	0161	0708	7 A	-		DOMS	5000BC	1	"PLATFORM"7-15
0757	-C	70		1A		UNDIF.FILL	ASSC			BRICK	G	PK	0737	0174	0161	0708	7 A	-		DOMS	5000BC	1	"PLATFORM"7-18
0737	-C	70		1A		UNDIF.FILL	ASSC			BRICK	G	PK	0737	0174	0161	6708	7 A	-		DOMS	5000BC	1	"PLATFORM"7-16
0837	-C	70	1	-1		UNDIF.FILL	ASSC			BRICK	G	PK	----	0174	0161	0708	7 A	-		DOMS	5000BC	1	"PLATFORM" 7-6
0868	-C	70	2	-1		WALLS	ASSC			BRICK	F	PK	----	----	----	0738	6 A	- 6 B	1	SETL	4500BC	1	RETAIN,WLS7-11
0753	-C	70	2	-1	-1	LEVELLING	ASSC			RUBBLE	E	PK	0738	----	----	0729	6 A	-		SETL	4500BC	1	RUBBLE 6 7-8
0738	-C	70	2	-1	-1	LEVELLING	ASSC			RUBBLE	E	PK	0738	----	----	0729	6 A	-		SETL	4500BC	1	RUBBLE 6 7-7
0793	-C	70	3	-1		UNDIF.FILL	ASSC			BRICK	G	PK	----	0174	0161	0708	7 A	-		DOMS	5000BC	1	"PLATFORM" 7-9
0732	-C	70	4	-1		UNDIF.FILL	ASSC			BRICK	G	PK	----	0174	0161	0708	7 A	-		DOMS	5000BC	1	"PLATFORM"7-18
0839	-C	70	5	-2		UNDIF.FILL	NONE			HARD	F	RPK	0713	0764	----	----	7 B	1- 7 B	6	DOMS	5000BC	1	7-21
0765	-C	70	5	-2		UNDIF.FILL	NONE			HARD	F	RPK	0713	0764	----	----	7 B	1- 7 B	6	DOMS	5000BC	1	7-20
0754	-C	70	5	-2		UNDIF.FILL	NONE			HARD	F	RPK	0713	0764	----	----	7 B	1- 7 B	6	DOMS	5000BC	1	7-22
0713	-C	70	5	-2		UNDIF.FILL	NONE			HARD	F	RPK	0713	0764	----	----	7 B	1- 7 B	6	DOMS	5000BC	1	7-19
0803	-C	70	5	-3		UNDIF.FILL	NONE			BRICK	G	PK	0794	0785	----	0727	6 B	2-		SETL	4500BC	1	7-19
0794	-C	70	5	-3		UNDIF.FILL	NONE			BRICK	G	PK	0794	0785	----	0727	6 B	2-		SETL	4500BC	1	7-21
0836	-C	70	5	-4		UNDIF.FILL	NONE			HARD	G	RPK	0816	0813	----	----	7 C	1-		SETL	5000BC	1	7-22
0816	-C	70	5	-4		UNDIF.FILL	NONE			HARD	G	RPK	0816	0813	----	----	7 C	1-		SETL	5000BC	1	7-21
0842	-C	70	5	-5		UNDIF.FILL	ASSC			BRICK	G	PK	----	0174	0161	0708	7 A	-		DOMS	5000BC	1	"PLATFORM"7-21
0847	-C	70	5	-6		MIXED FILL	ASSC			HARD	F	RPK	----	0767	----	----	7 C	1- 7 C	2	SETL	5000BC	1	7-25
0850	-C	70	5	-7		MIXED FILL	OUT		OP-N	GEL	G	RPK	0780	----	----	----	7 D	-		SETL	5000BC	1	MNY SHRDS 7-27
0827	-C	70	5	-7		MIXED FILL	OUT		OP-N	GEL	G	RPK	0780	----	----	----	7 D	-		SETL	5000BC	1	7-29
0817	-C	70	5	-7		MIXED FILL	OUT		OP-N	GEL	G	RPK	0780	----	----	----	7 D	-		SETL	5000BC	1	7-?
0780	-C	70	5	-7		GRAVE	OUT		OP-N	GEL	G	PK	0780	----	----	----	7 D	-		SETL	5000BC	1	BUDIAL#2 7-28
0833	-C	70	5	-8		UNDIF.FILL				HARD	F	RPK	----	0160	----	----	7 E	-		DOMS	5000BC	1	STERILE SOIL
0764	-C	70	6	-1		UNDIF.FILL	NONE			HARD	F	RPK	----	0713	----	----	7 B	1- 7 B	6	DOMS	5000BC	1	7-23
0852	-C	70	6	-2		UNDIF.FILL	NONE			HARD	G	RPK	0813	0816	----	----	7 C	1-		SETL	5000BC	1	7-28
0831	-C	70	6	-2		UNDIF.FILL	NONE			HARD	G	RPK	0813	0816	----	----	7 C	1-		SETL	5000BC	1	7-26
0813	-C	70	6	-2		UNDIF.FILL	NONE			HARD	G	RPK	0813	0816	----	----	7 C	1-		SETL	5000BC	1	BURIALS 7-27
0829	-C	70	6	-3		MIXED FILL	ASSC			HARD	F	RPK	0763	0847	----	----	7 C	1- 7 C	2	SETL	5000BC	1	7-30
0824	-C	70	6	-3		MIXED FILL	ASSC			HARD	F	RPK	0763	0847	----	----	7 C	1- 7 C	2	SETL	5000BC	1	7-28
0763	-C	70	6	-3		MIXED FILL	ASSC			HARD	F	RPK	0763	0847	----	----	7 C	1- 7 C	2	SETL	5000BC	1	7-24
0178	-C	70	6	-3		MIXED FILL	ASSC			HARD	F	RPK	0763	0847	----	----	7 C	1- 7 C	2	SETL	5000BC	1	7-29
0867	-C	70	6	-4		MIXED FILL	OUT		OP-N	GEL	G	RPK	----	0850	----	----	7 D	-		SETL	5000BC	1	MNY SHRDS 8-1
0854	-C	70	6	-5		UNDIF.FILL	NONE			BRICK	G	PK	0821	0708	----	----	6 B	2-		SETL	4500BC	1	8-3
0821	-C	70	6	-5		UNDIF.FILL	NONE			BRICK	G	PK	0821	0708	----	----	6 B	2-		SETL	4500BC	1	8-4
0751	-C	70	6	-6		UNDIF.FILL	ASSC			BRICK	G	PK	----	0174	0161	[illegible]708	7 A	-		DOMS	5000BC	1	"PLATFORM" 8-5
0855	-C	70	6	-7		MIDDEN	OUT		OP-N	ASHY	G	FPK	----	0185	----	[illegible]57	7 B	2-		DOMS	5000BC	1	8-18
0814	-C	70	7	-2		UNDIF.FILL	NONE			BRICK	G	PK	0785	0794	----	0727	6 B	2-		SETL	4500BC	1	8-6
0785	-C	70	7	-2		UNDIF.FILL	NONE			BRICK	G	PK	0785	0794	----	0727	6 B	2-		SETL	4500BC	1	8-9
0862	-C	70	7	-3		UNDIF.FILL	ASSC			BRICK	G	PK	----	0174	0161	0708	7 A	-		DOMS	5000BC	1	"PLATFORM"8-10
0832	-C	70	7	-4		UNDIF.FILL	ASSC			BRICK	G	PK	0815	0174	0161	0708	7 A	-		DOMS	5000BC	1	"PLATFORM"8-13
0815	-C	70	7	-4		UNDIF.FILL	ASSC			BRICK	G	PK	0815	0174	0161	0708	7 A	-		DOMS	5000BC	1	"PLATFORM"8-15
0822	-C	70	7	-4	-2	IM.AB.FLR.	IN	RM3		RUBBLE	G	PK	----	----	----	0815	7 A	-		DOMS	5000BC	1	8-10
0179	-C	71	1	-1		MIXED FILL	ASSC			GEL	G	RPK	0157	----	----	----	7 D	-		SETL	5000BC	1	6-13
0180	-C	71	1	-1		MIXED FILL	ASSC			GEL	G	RPK	0157	----	----	----	7 D	-		SETL	5000BC	1	CU PIN 6-14
0157	-C	71	1	-1		MIXED FILL	ASSC			GEL	G	RPK	0157	----	----	----	7 D	-		SETL	5000BC	1	6-12,15,13
0160	-C	71	1	-2		UNDIF.FILL				HARD	F	RPK	----	0833	----	----	7 E	-		SETL	5000BC	1	STERILE SOIL
0175	-C	71	2	-1		ROOM FILL	ASSC			BRICK	G	PK	0161	0158	0164	0737	7 A	-		DOMS	5000BC	3	FALL IN 1 7-21
0161	-C	71	2	-1		ROOM FILL	ASSC			BRICK	G	PK	0161	0158	0164	0737	7 A	-		DOMS	5000BC	3	FALL 6/27-7/1
0158	-C	71	3	-1		ROOM FILL	ASSC			BRICK	G	PK	----	0161	0164	0737	7 A	-		DOMS	5000BC	1	RM.FILL 7-1
0164	-C	71	3	-1	-4	FLR.+ABOVE	IN	RM3		BRICK	E	FPK	----	0163	----	0158	7 A	-		DOMS	5000BC	3	ROOM 4 7-6
0163	-C	71	3	-1	-5	FLR.+ABOVE	IN	RM1		BRICK	E	FPK	----	0164	----	0158	7 A	-		DOMS	5000BC	3	ROOM 5 7-6
0159	-C	71	3	-2		UNDIF.FILL	NONE			SFT/BK	G	PK	----	0171	0188	0167	6 B	2-		SETL	4500BC	1	ASHY 12 7/3-10
0188	-C	71	3	-3		ROOM FILL	ASSC			BRICK	G	PK	----	0158	0164	0737	7 A	-		DOMS	5000BC	1	7-22
0166	-C	71	3	-3	-1	FLR.+ABOVE	IN	RM3		SOFT	E	FPK	----	0164	----	0158	7 A	-		DOMS	5000BC	3	ROOM 8 7-13
0162	-C	71	3	-3	-1	FLR.+ABOVE	IN	RM3		SOFT	E	FPK	----	0164	----	0158	7 A	-		DOMS	5000BC	3	ROOM 8 7-7
0168	-C	71	3	-3	-4	FLR.+ABOVE	IN	RM3		BRICK	E	FPK	0168	0164	----	0158	7 A	-		DOMS	5000BC	3	ROOM 9 7-15
0165	-C	71	3	-3	3-4	FLR.+ABOVE	ASSC			BRICK	E	FPK	----	0164	----	0158	7 A	-		DOMS	5000BC	1	MXD-OUO+IN7-13
0167	-C	71	4	-1		ON FLOOR	IN	RM1		SOFT	E	FPK	----	----	0171	----	6 B	1-		SETL	4500BC	1	7-14
0169	-C	71	4	-2		UNDIF.FILL	NONE			BRICK	G	PK	----	0171	0174	0167	6 B	2-		SETL	4500BC	1	7-15
0171	-C	71	4	-3		MIDDEN	NONE			ASHY	G	PK	----	0159	0188	0167	6 B	2-		SETL	4500BC	1	ASH 12 7-17
0170	-C	71	4	-3	-1	FLR.+ABOVE	IN	RM3		BRICK	E	FPK	0170	0164	----	0158	7 A	-		DOMS	5000BC	3	ROOM 10 7-15
0172	-C	71	4	-4	-1	FLR.+ABOVE	IN	RM3		BRICK	E	FPK	0168	0164	----	0158	7 A	-		DOMS	5000BC	1	ROOM 9 7-19
0209	-C	71	4	-4	-2	FLR.+ABOVE	IN	RM3		BRICK	E	FPK	0168	0164	----	0158	7 A	-		DOMS	5000BC	1	ROOM 9 7-24
0173	-C	71	4	-4	-2	FLR.+ABOVE	IN	RM3		BRICK	E	FPK	0170	0164	----	0158	7 A	-		DOMS	5000BC	1	ROOM 10 7-19
0174	-C	71	4	3A		IN FLOORS	OUT		OP-N	LAMIN.	G	PK	----	0737	0161	0708	7 A	-		DOMS	5000BC	1	7-20
0208	-C	71	6	-1	-1	IN FLOORS	IN	RM1		ASHY	E	FPK	0187	----	----	----	7 B	2-		DOMS	5000BC	3	ROOM 6 7-27
0187	-C	71	6	-1	-1	IN FLOORS	IN	RM1		ASHY	E	FPK	0187	----	----	----	7 B	2-		DOMS	5000BC	3	ROOM 6 7-28
0210	-C	71	6	-1	-2	IM.AB.FLR.	OUT		ALLY	ASHY	E	FPK	0184	0187	----	----	7 B	2-		DOMS	5000BC	3	ALLEY 7 7-26
0204	-C	71	6	-1	-2	IM.AB.FLR.	OUT		ALLY	ASHY	E	FPK	0184	0187	----	----	7 B	2-		DOMS	5000BC	3	ALLEY 7 7-29

LOC	SQR	YR	TT	STR	FEA	FLR/FL/FTR	IN/X	ICX	ECX	FILL	Q	REC	SAME	CTMN	EARL	LATE	PERIOD	--PERIOD	SITE	DATE	C	COMMENT
0202	-C	71	6	-1	-2	IN.AB.FLR.	OUT		ALLY	ASHY	E	FPK	0184	0187	----	----	7 B 2-		DOMS	5000BC	3	ALLEY 7 8-14
0193	-C	71	6	-1	-2	IN.AB.FLR.	OUT		ALLY	ASHY	E	FPK	0184	0187	----	----	7 B 2-		DOMS	5000BC	3	ALLEY 7 7-27
0186	-C	71	6	-1	-2	IN.AB.FLR.	OUT		ALLY	ASHY	E	FPK	0184	0187	----	----	7 B 2-		DOMS	5000BC	3	ALLEY 7 7-28
0184	-C	71	6	-1	-2	IN.AB.FLR.	OUT		ALLY	ASHY	E	FPK	0184	0187	----	----	7 B 2-		DOMS	5000BC	3	ALLEY 7 7-28
0214	-C	71	6	-1	-3	IN FLOORS	IN	RM1		ASHY	E	FPK	0189	0187	----	----	7 B 2-		DOMS	5000BC	3	ROOM 3 8-11
0189	-C	71	6	-1	-3	IN FLOORS	IN	RM1		ASHY	E	FPK	0189	0187	----	----	7 B 2-		DOMS	5000BC	3	ROOM 3 7-28
0190	-C	71	6	-1	-3	IN FLOORS	IN	RM1		ASHY	E	FPK	0189	0187	----	----	7 B 2-		DOMS	5000BC	3	ROOM 3 7-27
0199	-C	71	6	-1	-4	IN FLOORS	IN	RM1		ASHY	E	FPK	0191	0187	----	----	7 B 2-		DOMS	5000BC	3	RM.2 8-11,12
0191	-C	71	6	-1	-4	IN FLOORS	IN	RM1		ASHY	E	FPK	0191	0187	----	----	7 B 2-		DOMS	5000BC	3	ROOM 2 7-29
0195	-C	71	6	-1	-5	ON FLOOR	IN	RM3		ASHY	E	FPK	----	0187	----	----	7 B 2-		DOMS	5000BC	3	RM.8 8-15
0215	-C	71	6	-1	-6A	FLR.+ABOVE	OUT		OP-F	SOFT	E	FPK	0182	----	----	0192	7 B 1-		DOMS	5000BC	1	8-3
0213	-C	71	6	-1	-6	IN FLOORS	OUT		CORT	HARD	E	FPK	----	0187	----	----	7 B 2-		DOMS	5000BC	3	COURT 23 8-7
0203	-C	71	6	-1	-6	IN FLOORS	OUT		CORT	HARD	E	FPK	----	0187	----	----	7 B 2-		DOMS	5000BC	3	COURT 23 7-31
0200	-C	71	6	-1	-6	IN FLOORS	OUT		CORT	HARD	E	FPK	----	0187	----	----	7 B 2-		DOMS	5000BC	3	COURT 23 8-7
0197	-C	71	6	-1	-6A	FLR.+ABOVE	OUT		OP-F	SOFT	E	FPK	0182	----	----	0192	7 B 1-		DOMS	5000BC	1	8-4
0182	-C	71	6	-1	-6A	FLR.+ABOVE	OUT		OP-F	SOFT	E	FPK	0182	----	----	0192	7 B 1-		DOMS	5000BC	1	8-5
0198	-C	71	6	-1	-7	IN FLOORS	IN	RM1		ASHY	E	FPK	----	0187	----	----	7 B 2-		DOMS	5000BC	3	ROOM 5 7-31
0205	-C	71	6	-1	-8	IN FLOORS	OUT		OP-N	HARD	E	FPK	0201	0187	----	----	7 B 2-		DOMS	5000BC	1	8-14
0201	-C	71	6	-1	-8	IN FLOORS	OUT		OP-N	HARD	E	FPK	0201	0187	----	----	7 B 2-		DOMS	5000BC	1	8-12
0196	-C	71	6	-1	-9	IN.AB.FLR.	IN	RM1		ASHY	E	FPK	----	0187	----	----	7 B 2-		DOMS	5000BC	3	ROOM 4 8-14
0206	-C	71	6	1A		FLR.+ABOVE	OUT		OP-F	??	E	FPK	0192	0211	0182	----	7 B 1-		DOMS	5000BC	1	8-2
0207	-C	71	6	1A		FLR.+ABOVE	OUT		OP-F	??	E	FPK	0192	0211	0182	----	7 B 1-		DOMS	5000BC	1	8-1
0192	-C	71	6	1A		FLR.+ABOVE	OUT		OP-F	??	E	FPK	0192	0211	0182	----	7 B 1-		DOMS	5000BC	1	8-3
0194	-C	71	6	1A		FLR.+ABOVE	OUT		OP-F	??	E	FPK	0192	0211	0182	----	7 B 1-		DOMS	5000BC	1	7-28
0183	-C	71	7	-1		FLR.+ABOVE	OUT		OP-F	??	G	FPK	----	----	----	0211	7 B 1-		DOMS	5000BC	1	8-10
0185	-C	71	7	-2		MIDDEN	OUT		OP-N	ASHY	G	FPK	----	0855	----	0167	7 B 2-		DOMS	5000BC	1	8-15
0212	-C	71	7	1A		FLR.+ABOVE	OUT		OP-F	??	E	FPK	0211	0192	0182	----	7 B 1-		DOMS	5000BC	1	8-9
0211	-C	71	7	1A		FLR.+ABOVE	OUT		OP-F	??	E	FPK	0211	0192	0182	----	7 B 1-		DOMS	5000BC	1	8-7
2101	-C	73		-S		FLR.LEVEL	ASSC			??	F	FPK	----	----	----	----	7 B 2-	7 B 3	DOMS	5000BC	1	CLEANUP VIIB2
2102	-C	73		-1	-1	IN FLOORS	OUT		OP-N	LAMIN.	G	FPK	----	2103	2106	0201	7 B 2-		DOMS	5000BC	1	6-21
2103	-C	73		-1	1-2	IN FLOORS	OUT		OP-N	LAMIN.	G	FPK	----	2102	2106	0201	7 B 2-		DOMS	5000BC	1	6-23
2108	-C	73		-3		FLR.+ABOVE	OUT		OP-N	SOFT	G	FPK	----	2113	2110	2106	7 B 3-		DOMS	5000BC	1	INC T1 6-25,26
2112	-C	73		-6		FLR.+ABOVE	NONE			ASHY	E	PK	----	----	----	----	7 B 3-	7 B 6	DOMS	5000BC	1	W.OF T2 7-1,2
2129	-C	73		-9		FLR.+ABOVE	ASSC			BRICK	G	PK	2126	2118	----	----	7 C 2-		DOMS	5000BC	1	7-28
2126	-C	73		-9		FLR.+ABOVE	ASSC			BRICK	G	PK	2126	2118	----	----	7 C 2-		DOMS	5000BC	1	7-25,26
2127	-C	73		-9		FLR.+ABOVE	ASSC			BRICK	G	PK	2126	2118	----	----	7 C 2-		DOMS	5000BC	1	7-24,25
2128	-C	73		-9		FLR.+ABOVE	ASSC			BRICK	G	PK	2126	2118	----	----	7 C 2-		DOMS	5000BC	1	7-26
2121	-C	73		6-9		UNDIF.FILL	NONE			BRICK	G	RPK	2117	2114	----	----	7 C 1-		DOMS	5000BC	1	= C.73.7 7-16
2124	-C	73		6-9		UNDIF.FILL	NONE			BRICK	G	RPK	2117	2114	----	----	7 C 1-		DOMS	5000BC	1	= C.73.7 7-16
2117	-C	73		6-9		UNDIF.FILL	NONE			BRICK	G	RPK	2117	2114	----	----	7 C 1-		DOMS	5000BC	1	= C.73.7 7-15
2111	-C	73	1			FLR.LEVEL	ASSC			??	F	FPK	----	----	----	----	7 B 2-	7 B 3	DOMS	5000BC	1	EXC.V11B2 RMS.
2104	-C	73	1	-1		IN FLOORS	OUT		OP-N	LAMIN.	G	FPK	----	2102	2106	0201	7 B 2-		DOMS	5000BC	1	6-24
2107	-C	73	1	-2		FLR.+ABOVE	OUT		OP-N	BRICK	E	FPK	2106	----	2113	2104	7 B 3-		DOMS	5000BC	1	6-25
2106	-C	73	1	-2		FLR.+ABOVE	OUT		OP-N	BRICK	E	FPK	2106	----	2113	2104	7 B 3-		DOMS	5000BC	1	6-24
2113	-C	73	1	-3		FLR.+ABOVE	OUT		OP-N	LAMIN.	G	FPK	2113	2108	2110	2106	7 B 3-		DOMS	5000BC	1	7-3,4
2116	-C	73	1	-3		FLR.+ABOVE	OUT		OP-N	LAMIN.	G	FPK	2113	2108	2110	2106	7 B 3-		DOMS	5000BC	1	7-4
2110	-C	73	1	-4		FLR.+ABOVE	OUT		OP-N	SOFT	E	FPK	----	----	----	2113	7 B 3-		DOMS	5000BC	1	6-28
2109	-C	73	1	-5		FLR.+ABOVE	OUT		OP-N	SOFT	E	FPK	----	----	----	2113	7 B 3-		DOMS	5000BC	1	6-28
2115	-C	73	1	-8		FLR.+ABOVE	ASSC			BRICK	G	RPK	----	----	----	----	7 B 4-	7 B 6	DOMS	5000BC	1	7-9,10
2125	-C	73	1	-9		UNDIF.FILL	ASSC			BRICK	G	RPK	2118	2119	----	----	7 C 2-		DOMS	5000BC	1	7-23
2122	-C	73	1	-9		UNDIF.FILL	ASSC			BRICK	G	RPK	2118	2119	----	----	7 C 2-		DOMS	5000BC	1	7-22
2118	-C	73	1	-9		UNDIF.FILL	ASSC			BRICK	G	RPK	2118	2119	----	----	7 C 2-		DOMS	5000BC	1	7-11
2105	-C	73	1	1-2		MIXED FILL	OUT		OP-N	SD/BRK	F	PK	----	----	----	----	7 B 2-	7 B 3	DOMS	5000BC	1	6-23
2114	-C	73	1	6-8		UNDIF.FILL	NONE			HARD	G	RPK	----	2117	----	----	7 C 1-		DOMS	5000BC	1	= C.73.7 7-14
2123	-C	73	2	-9		UNDIF.FILL	ASSC			BRICK	G	RPK	2119	2126	----	----	7 C 2-		DOMS	5000BC	1	7-21
2119	-C	73	2	-9		UNDIF.FILL	ASSC			BRICK	G	RPK	2119	2126	----	----	7 C 2-		DOMS	5000BC	1	7-19
2120	-C	73	2	-9		UNDIF.FILL	ASSC			BRICK	G	RPK	2119	2126	----	----	7 C 2-		DOMS	5000BC	1	7-17,18
0800	-D	69		-2		FOUNDATION	ASSC			HARD	G	PK	----	----	----	----	5 C -		DOMS	4000BC	1	FDTN TRCH 6-17
0724	-D	69		-3		UNDIF.FILL	NONE			??	G	PK	----	----	----	0699	6 A -		SETL	4500BC	1	UNDER VC 6-18
0718	-D	69		-3	-3	LEVELLING	ASSC			RUBBLE	E	PK	----	0729	----	0699	6 A -		SETL	4500BC	1	RUBBLE 26 6-21
0859	-D	69		2-3		UNDIF.FILL	NONE			??	F	PK	----	----	----	----	5 C -	6 A	SETL	4000BC	1	6-18
0749	-D	69	1	11		UNDIF.FILL	NONE			HARD	G	RPK	0701	----	----	----	7 C 1-		SETL	5000BC	1	7-12
0701	-D	69	1	11		UNDIF.FILL	NONE			HARD	G	RPK	0701	----	----	----	7 C 1-		SETL	5000BC	1	7-13
0717	-D	69	1	6-7		PLATFORM	NONE			BRICK	F	PK	----	0821	----	----	6 B 1-	6 B 2	SETL	4500BC	1	6-29
2303	-D	73		-6	27	ON FLOOR	IN	RM1		BURNED	E	FPK	----	0187	----	----	7 B 2-		DOMS	5000BC	1	ROOM 25 7-31
2301	-D	73		-6	31	FLR.+ABOVE	ASSC			SANDY	G	FPK	----	----	2302	----	7 B 1-		DOMS	5000BC	1	7-23
2302	-D	73		-7	31	FLR.+ABOVE	ASSC			SANDY	F	FPK	----	2304	----	----	7 B 3-		DOMS	5000BC	1	7-23
2308	-D	73		-7	42	MIDDEN	OUT		OP-N	ASHY	G	OTH	2307	----	----	----	7 B 3-	7 B 5	DOMS	5000BC	1	PART SCRND 8-7
2309	-D	73		-7	42	MIDDEN	OUT		OP-N	ASHY	G	OTH	2307	----	----	----	7 B 3-	7 B 5	DOMS	5000BC	1	PART SCRND 8-7
2307	-D	73		-7	42	MIDDEN	OUT		OP-N	ASHY	G	OTH	2307	----	----	----	7 B 3-	7 B 5	DOMS	5000BC	1	PART SCRND 8-8
2304	-D	73		-7	43	UNDIF.FILL	OUT		OP-N	LAMIN.	G	FPK	----	2306	2305	----	7 B 3-		DOMS	5000BC	1	8-1
2306	-D	73		-7	44	UNDIF.FILL	OUT		OP-N	LAMIN.	G	FPK	----	2304	----	----	7 B 3-		DOMS	5000BC	1	8-5
2305	-D	73		-8	43	UNDIF.FILL	OUT		OP-N	LAMIN.	G	FPK	----	----	----	2304	7 B 4-		DOMS	5000BC	1	8-5
0886	-E	69	2	-3		FLR.+ABOVE	OUT		OP-N	??	E	PK	----	----	0876	----	7 B 2-		DOMS	5000BC	1	BETW.1+2 6-26
0884	-E	69	2	-4	-5	FLR.+ABOVE	IN	RM3		BRICK	G	PK	----	----	----	----	7 B 6-		DOMS	5000BC	1	ROOM 7 7-15
0888	-E	69	2	-5		FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	----	----	0880	----	7 B 6-		DOMS	5000BC	1	7-13
0892	-E	69	2	-8		IN FLOORS	OUT		OP-N	HARD	G	PK	0880	0887	----	0888	7 B 6-		DOMS	5000BC	1	BLDG.SFS.7-13
0880	-E	69	2	-8		IN FLOORS	OUT		OP-N	HARD	G	PK	0880	0887	----	0888	7 B 6-		DOMS	5000BC	1	BLDG.SFS.7-14
0883	-E	69	3	-2		FLR.LEVEL	IN	RM3		ASHY	G	PK	----	----	0887	----	7 B 5-	7 B 6	DOMS	5000BC	1	ROOM 22 6-24
0878	-E	69	3	-2		FLR.+ABOVE	IN	RM3		BRICK	G	PK	0881	0885	0883	----	7 B 5-	7 B 6	DOMS	5000BC	1	ROOM 22 6-29
0876	-E	69	3	-2		FLR.+ABOVE	IN	RM3		BRICK	G	PK	0881	0885	0883	----	7 B 5-	7 B 6	DOMS	5000BC	1	ROOM 22 6-14
0877	-E	69	3	-2		FLR.+ABOVE	IN	RM3		BRICK	G	PK	----	0881	0883	----	7 B 5-	7 B 6	DOMS	5000BC	1	+T7.4=885 6-23
0881	-E	69	3	-2	-1	FLR.+ABOVE	IN	RM3		BRICK	G	PK	0881	0885	0883	----	7 B 5-	7 B 6	DOMS	5000BC	1	-N.BK.RM22 6-25
0893	-E	69	3	11		IN FLOORS	OUT		OP-N	HARD	G	PK	----	----	0887	----	7 B 6-		DOMS	5000BC	1	AGNST WLL 7-22
0887	-E	69	3	12		IN FLOORS	OUT		OP-N	SFT/BK	G	PK	----	0880	----	----	7 B 6-		DOMS	5000BC	1	BLDG.SFS.7-13
0889	-E	69	7	-4	-1	FLR.+ABOVE	IN	RM1		BRICK	G	PK	0885	0881	0887	----	7 B 5-	7 B 6	DOMS	5000BC	1	ROOM 21 6-12
0885	-E	69	7	-4	-1	FLR.+ABOVE	IN	RM1		BRICK	G	PK	0885	0881	0887	----	7 B 5-	7 B 6	DOMS	5000BC	1	ROOM 21 6-26
0399	B-BW	71		-3		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	----	0542	0410	----	4 C 1-		MONU	3200BC	1	6-21 THRU 7-14
0410	B-BW	71		-6		IN FLOORS	OUT		OP-N	HARD	E	PK	----	0551	0409	0399	4 C 1-		MONU	3200BC	1	AREA G 7-24
0409	B-BW	71		-7		ROOM FILL	OUT		OP-N	SOFT	G	PK	----	0549	0468	0410	4 C 1-		MONU	3200BC	1	AREA G 7-25
0297	BM	71		-1	-1	ROOM FILL	IN	RM1		SFT/BK	G	PK	0283	----	0291	----	4 C 1-	4 B 6	MONU	3200BC	1	RM.1B 6-21
0283	BM	71		-1	-1	ROOM FILL	IN	RM1		SFT/BK	G	PK	0283	----	0291	----	4 C 1-	4 B 6	MONU	3200BC	1	RM.1B 6-20
0291	BM	71		-2	-1	ROOM FILL	IN	RM1		BRICK	G	PK	----	0293	0290	0283	4 C 1-	4 B 6	MONU	3200BC	1	RM.1B 6-21
0290	BM	71		-3	-5	HEARTH	IN	RM1		BURNED	E	PK	----	----	0307	0291	4 C 2-		MONU	3200BC	1	RM.1B 7-1
0307	BM	71		-3A		MIXED FILL	ASSC			SFT/BK	F	PK	----	----	----	0290	4 C -	5 A	SETL	3200BC	1	RM.1B AREA 8-3
0293	BM	71		-5		ROOM FILL	IN	SPEC		SOFT	G	PK	----	0305	0330	----	4 C 1-		MONU	3200BC	1	RM.6 WELL 6-23
0330	BM	71		-6	-2	IN.AB.FLR.	IN	SPEC		SOFT	G	PK	----	0327	0325	0293	4 C 2-		MONU	3200BC	1	RM.6 WELL 8-3
0280	BM	71		4-5		ROOM FILL	IN	SPEC		SOFT	G	PK	----	0305	0330	----	4 C 1-		MONU	3200BC	1	R.6 WELL 6-22
0550	BW	71		-6		IN FLOORS	OUT		OP-N	HARD	F	PK	----	0543	0549	----	4 C 1-		MONU	3200BC	1	AREA G 7-22
0551	BW	71		-6		IN FLOORS	OUT		OP-N	HARD	G	PK	----	0543	----	----	4 C 1-		MONU	3200BC	1	AREA G 7-24
0549	BW	71		-7		FLR.+ABOVE	OUT		OP-N	SOFT	F	PK	----	0409	0468	0550	4 C 1-		MONU	3200BC	1	AREA G 7-22
0547	BW	71		-7	-4	FLR.+ABOVE	OUT		OP-N	SFT/BK	E	PK	----	0552	0555	----	4 C 1-		SETL	3200BC	1	AREA G 7-27

LOC	SQR	YR	TT	STR	FEA	FLR/FL/FTR	IN/X	ICX	ECX	FILL	Q	REC	SAME	CTMN	EARL	LATE	PERIOD	--PERIOD	SITE	DATE	C	COMMENT
0556	BW	71		-7	-6	WALLS	ASSC			SFT/BK	E	PK	----	0547	0555	----	4 C	1-	SETL	3200BC	1	AREA G 7-28
0554	BW	71		-8	-2A	FLR.+ABOVE	ASSC			MIXED	F	PK	----	0549	0468	0543	4 C	1-	MONU	3200BC	1	AREA G 7-28
0537	BW	71	1	-2		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	----	0399	0526	----	4 C	1-	MONU	3200BC	1	AREA G 6-17
0544	BW	71	1	-4		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	0526	0399	0536	0537	4 C	1-	MONU	3200BC	1	AR.G 6-29,7-1
0526	BW	71	1	-4		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	0526	0399	0536	0537	4 C	1-	MONU	3200BC	1	AREA G 6-27
0536	BW	71	1	-5		FLR.+ABOVE	OUT		OP-N	GEL	G	PK	----	----	0517	0526	4 C	1-	MONU	3200BC	1	AREA G 6-27
0517	BW	71	1	-6		MIXED FILL	OUT		??	MIXED	F	PK	----	----	----	0536	4 C	- 6 A	MONU	3200BC	1	AREA G 6-28
0539	BW	71	2	-5B		UNDIF.FILL	ASSC			BRICK	G	PK	----	----	0545	----	4 C	1-	MONU	3200BC	1	CORNER 7-8
0525	BW	71	2	-6		FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	----	0543	----	----	4 C	1-	MONU	3200BC	1	AREA G 7-3,10
0542	BW	71	2	-6	-2	FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	----	0399	0555	----	4 C	1-	MONU	3200BC	1	BUTTRESS 7-5
0553	BW	71	2	-6	-3	FLR.+ABOVE	OUT		OP-N	HARD	G	PK	0534	----	----	----	4 C	1-	MONU	3200BC	1	DRAIN 7-29
0534	BW	71	2	-6	-3	FLR.+ABOVE	OUT		OP-N	HARD	G	PK	0534	----	----	----	4 C	1-	MONU	3200BC	1	DRAIN AREA 7-5
0545	BW	71	2	-6B		ROOM FILL	ASSC			BRICK	G	PK	----	0542	----	0539	4 C	1-	MONU	3200BC	1	CORNER 7-10
0543	BW	71	2	-7		FLR.+ABOVE	OUT		OP-N	BRICK	G	PK	----	0551	0554	----	4 C	1-	MONU	3200BC	1	AREA G 7-6,7
1364	BW	73	2	-1	-1	WALLS	ASSC			BRICK	G	FPK	----	----	----	----	4 C	2-	MONU	3200BC	1	IN WALL 8-12
1363	BW	73	2	-2		UNDIF.FILL	NONE			??	F	PK	----	----	----	----	5 A	- 5 B	DOMS	3500BC	1	MXD.VA-B 8-13
1377	BW	73	2	-3		UNDIF.FILL	NONE			SOFT	G	PK	----	1349	----	----	6 B	1-	SETL	4500BC	1	8-13,14
0552	BWCW	71		-7	-2	FLR.+ABOVE	OUT		OP-N	SFT/BK	E	PK	----	0547	0555	----	4 C	1-	SETL	3200BC	1	AREA G 7-25
0309	BWCW	71		-7	-7	WALLS	ASSC			BRICK	E	PK	----	----	0468	----	4 C	1-	SETL	3200BC	1	AREA G 8-4
0468	BWCW	71		-9	-2	FLR.+ABOVE	OUT		OP-N	SFT/BK	G	PK	----	----	0466	0309	4 C	1-	SETL	3200BC	1	AREA G 8-7
0555	BWCW	71		10		IN FLOORS	OUT		OP-F	GEL	G	PK	----	0466	----	0468	4 C	2-	MONU	3200BC	1	AREA G 8-8,9
0469	BWCW	71		11		FLR.+ABOVE	OUT		OP-F	GEL	E	PK	0466	0555	----	0468	4 C	2-	SETL	3200BC	1	AREA G 8-11
0466	BWCW	71		11		FLR.+ABOVE	OUT		OP-F	GEL	E	PK	0466	0555	----	0468	4 C	2-	SETL	3200BC	1	AREA G 8-12
0467	BWCW	71		11		FLR.+ABOVE	OUT		OP-F	GEL	E	PK	0466	0555	----	0468	4 C	2-	SETL	3200BC	1	AREA G 8-14
1907	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER 6-25
1908	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER 6-28
1909	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER 6-28
1903	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER 6-24
1904	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER 6-24
1905	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER 6-27
1906	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER 6-26
1901	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER 6-24
1902	CDE-	73		-5	-1	FURNACE	ASSC			BURNED	P	PK	1901	----	1910	----	5 A	1-	CRFT	3500BC	1	VC/LATER 6-23
1929	CDE-	73		-5	-7	UNSHAP.PIT	NONE			SOFT	P	PK	1911	----	----	----	4 B	- 7 B 2	SETL	2500BC	1	PIT 20 7-23
1911	CDE-	73		-5	-7	UNSHAP.PIT	NONE			SOFT	P	PK	1911	----	----	----	4 B	- 7 B 2	SETL	2500BC	1	PIT 20 7-3
1912	CDE-	73		-1	-8	FLR.+ABOVE	IN	RM1		BRICK	F	PK	----	0700	1917	----	5 C	-	DOMS	4000BC	1	ROOM 16 7-3,4
1913	CDE-	73		-1	-9	FLR.+ABOVE	OUT		OP-N	BRICK	F	PK	----	0700	1917	----	5 C	-	DOMS	4000BC	1	OUTSIDE 7-3,5
1910	CDE-	73		-1	5-6	WALLS	ASSC			BRICK	F	PK	----	----	----	----	5 C	-	DOMS	4000BC	1	WALL 6-30
1917	CDE-	73		-2		LEVELLING	NONE			RUBBLE	G	PK	----	0698	1915	----	6 A	-	SETL	4500BC	1	UNDER VC 7-9
1918	CDE-	73		-2	10	LEVELLING	ASSC			RUBBLE	G	PK	1915	0718	1917	1928	6 A	-	SETL	4500BC	1	RUBBLE 26 7-11
1915	CDE-	73		-2	10	LEVELLING	ASSC			RUBBLE	G	PK	1915	0718	1917	1928	6 A	-	SETL	4500BC	1	RUBBLE 26 7-9
1916	CDE-	73		-2	10	LEVELLING	ASSC			RUBBLE	G	PK	1915	0718	1917	1928	6 A	-	SETL	4500BC	1	RUBBLE 26 7-10
1928	CDE-	73		-2	11	WALLS	ASSC			BRICK	F	PK	----	----	----	1915	6 A	-	SETL	4500BC	1	WLS.17+18 7-21
1924	CDE-	73		-2	13	LEVELLING	ASSC			RUBBLE	G	PK	1922	0718	1917	1928	6 A	-	SETL	4500BC	1	RUBBLE 26 7-16
1922	CDE-	73		-2	13	LEVELLING	ASSC			RUBBLE	G	PK	1922	0718	1917	1928	6 A	-	SETL	4500BC	1	RUBBLE 26 7-11
1930	CDE-	73		-2	18	LEVELLING	NONE			RUBBLE	G	PK	1925	1932	----	----	6 B	2-	SETL	4500BC	1	RUBBLE 18 7-23
1925	CDE-	73		-2	18	LEVELLING	NONE			RUBBLE	G	PK	1925	1932	----	----	6 B	2-	SETL	4500BC	1	RUBBLE 18 7-21
1926	CDE-	73		-2	18	LEVELLING	NONE			RUBBLE	G	PK	1925	1932	----	----	6 B	2-	SETL	4500BC	1	RUBBLE 18 7-22
1927	CDE-	73		-2	20	WALLS	ASSC			BRICK	F	PK	----	----	----	----	6 B	1- 6 B 2	SETL	4500BC	1	FROM WALL 7-22
1919	CDE-	73		-3		UNDIF.FILL	NONE			HARD	G	PK	1914	0820	1922	----	6 B	1-	SETL	4500BC	1	YEL.CLAY 7-11
1920	CDE-	73		-3		UNDIF.FILL	NONE			HARD	G	PK	1914	0820	1922	----	6 B	1-	SETL	4500BC	1	YEL.CLAY 7-10
1914	CDE-	73		-3		UNDIF.FILL	NONE			HARD	G	PK	1914	0820	1922	----	6 B	1-	SETL	4500BC	1	YELW.CLAY 7-8
1923	CDE-	73		-3	10	MIXED FILL	NONE			??	F	PK	----	----	----	----	6 B	1- 6 B 2	SETL	4500BC	1	MIXED 7-17
1932	CDE-	73		-3	18	LEVELLING	NONE			RUBBLE	G	PK	----	1925	----	----	6 B	2-	SETL	4500BC	1	RUBBLE 18 7-24
1939	CDE-	73		-4		UNDIF.FILL			??	BRICK	F	PK	1935	----	----	----	7 A	- 7 B 2	DOMS	5000BC	1	7-31
1940	CDE-	73		-4		UNDIF.FILL			??	BRICK	F	PK	1935	----	----	----	7 A	- 7 B 2	DOMS	5000BC	1	8-1
1935	CDE-	73		-4		UNDIF.FILL			??	BRICK	F	PK	1935	----	----	----	7 A	- 7 B 2	DOMS	5000BC	1	7-29
1936	CDE-	73		-4		UNDIF.FILL			??	BRICK	F	PK	1935	----	----	----	7 A	- 7 B 2	DOMS	5000BC	1	7-28
1937	CDE-	73		-4		UNDIF.FILL			??	BRICK	F	PK	1935	----	----	----	7 A	- 7 B 2	DOMS	5000BC	1	7-30
1933	CDE-	73		-4		UNDIF.FILL	OUT		??	BRICK	F	PK	1931	----	----	----	6 B	2- 7 A	DOMS	4500BC	1	7-26
1921	CDE-	73		2-3		UNDIF.FILL	NONE			HARD	F	PK	----	----	----	----	6 B	1- 6 B 2	SETL	4500BC	1	MXD.RUBBLE7-14
1938	CDE-	73	1	-4		UNDIF.FILL	OUT		??	BRICK	F	PK	1935	----	----	----	7 A	- 7 B 2	DOMS	5000BC	1	7030
1931	CDE-	73	1	-4		UNDIF.FILL	OUT		??	BRICK	F	PK	1931	----	----	----	6 B	2- 7 A	DOMS	4500BC	1	7-24
1934	CDE-	73	1	-4		UNDIF.FILL	OUT		??	BRICK	F	PK	1931	----	----	----	6 B	2- 7 A	DOMS	4500BC	1	7-24
1941	CDE-	73	2	-5		FLR.+ABOVE	ASSC			BRICK	G	PK	1941	----	----	----	7 B	4-	DOMS	5000BC	1	8-2
1942	CDE-	73	2	-5		FLR.+ABOVE	ASSC			BRICK	G	PK	1941	----	----	----	7 B	4-	DOMS	5000BC	1	8-1
1311	CW	73		-5	-1	UNSHAP.PIT	NONE			SOFT	P	PK	----	----	----	----	4 B	- 6 A	SETL	2500BC	1	PIT 9 6-28
1305	CW	73		-1		ROOM FILL	OUT		OP-N	??	G	PK	----	----	1304	1302	4 C	2-	MONU	3200BC	1	6-24
1340	CW	73		-2	-2	WALLS	ASSC			BRICK	G	FPK	----	----	----	----	4 C	2-	MONU	3200BC	1	IN WALL 7-31
1307	CW	73		-3		IN FLOORS	OUT		OP-N	SOFT	G	PK	----	1304	----	1305	4 C	2-	MONU	3200BC	1	6-24
1308	CW	73		-5		PLATFORM	NONE			BRICK	G	PK	----	0770	0740	0735	5 C	-	SETL	4000BC	1	PAVING 6-25
1310	CW	73		-7		UNSHAP.PIT	OUT		OP-N	SOFT	P	PK	----	----	----	----	4 C	- 6 A	SETL	3200BC	1	BEVEL-RIM BWLS
1309	CW	73	1	-5	-4	WALLS	ASSC			BRICK	P	PK	----	----	----	1305	4 C	2-	MONU	3200BC	1	UNSEALED 6-26
1313	CW	73	1	-3		UNDIF.FILL	ASSC			RUBBLE	P	PK	1303	----	1302	----	4 B	- 4 C	SETL	2500BC	1	?4B FOUND. 7-3
1303	CW	73	1	-3		UNDIF.FILL	ASSC			RUBBLE	P	PK	1303	----	1302	----	4 B	- 4 C	SETL	2500BC	1	?4B FOUND.6-21
1302	CW	73	1	-3	-1	IN FLOORS	OUT		OP-N	GEL	P	PK	----	----	1305	1303	4 C	2-	MONU	3200BC	1	UNSEALED 6-21
1304	CW	73	1	-5		IN FLOORS	OUT		OP-N	GEL	G	PK	----	1307	----	1305	4 C	2-	MONU	3200BC	1	6-23
1306	CW	73	1	-6		PLATFORM	NONE			BRICK	G	PK	----	0770	0740	0735	5 C	-	SETL	4000BC	1	PAVNG.6-24,26
1346	CW	73	3			LEVELLING	ASSC			RUBBLE	E	PK	----	0714	----	----	6 A	-	SETL	4500BC	1	RUBBLE 4 8-4
1350	CW	73	3	-1		LEVELLING	ASSC			RUBBLE	E	PK	----	0714	----	----	6 A	-	SETL	4500BC	1	RUBBLE 4 8-5
1349	CW	73	3	-2		UNDIF.FILL	NONE			SFT/BK	G	PK	----	1377	----	----	6 B	1-	SETL	4500BC	1	8-4

LOC	SQR	YR	TT	STR	FEA	FLR/FL/FTR	IN/X	ICX	ECX	FILL	Q	REC	SAME	CTMN	EARL	LATE	PERIOD	--PERIOD	SITE	DATE	C	COMMENT
3510	R37-	73		-1		SURFACE	ASSC			SOFT	P	FPK	----	----	3506	----	7 6 E-		SETL	5000BC	1	SURFACE 7-3
3506	R37-	73		-2		ROOM FILL	IN	RM3		SOFT	G	FPK	----	3535	3501	3510	7 6 C-	7 6 D	DOMS	5000BC	1	MOSTLY RM9 7-3
3501	R37-	73		-3		ROOM FILL	OUT		ALLY	SOFT	E	FPK	----	----	3507	3510	7 5 -		DOMS	5000BC	1	=3560 UPPR 7-3
3502	R37-	73		-3	-1	WALLS	ASSC			SOFT	G	FPK	3502	----	3504	3510	7 5 -	7 6 E	DOMS	5000BC	1	BETW.WALLS 7-3
3507	R37-	73		-6		MIXED FILL	ASSC			SOFT	F	FPK	----	----	3511	3504	7 3 -	7 4	DOMS	5000BC	1	=3560LWR 7-3/4
3511	R37-	73		-6	-1	ROOM FILL	ASSC			ASHY	E	FPK	----	----	3515	3507	7 2 -		DOMS	5000BC	1	=T1.22.1 7-3/4
3515	R37-	73		-7		MIXED FILL	ASSC			SOFT	F	FPK	----	3518	3518	3511	7 1 -	7 2	DOMS	5000BC	1	MOSTLY PH2 7-4
3516	R37-	73		-7	-1	FLR.+ABOVE	ASSC			BRICK	E	FPK	----	----	3520	3518	7 1 -		DOMS	5000BC	1	?WALLFALL 7-4
3518	R37-	73		-8		FLR.+ABOVE	ASSC			SFT/BK	E	FPK	----	3515	3516	3515	7 1 -		DOMS	5000BC	1	BLW 7S;=7N 7-5
3520	R37-	73		-9		FLR.LEVEL	ASSC			GEL	E	FPK	----	----	3521	3516	7 1 -		DOMS	5000BC	1	GEL FLOOR 7-4
3503	R37-	73		N-1		UNDIF.FILL	NONE			??	G	FPK	----	3513	3522	3519	8 -		SETL	5500BC	1	CUL+NONCUL 7-3
3512	R37-	73		N-1	N-2	UNDIF.FILL	NONE			??	G	FPK	----	3513	3505	3519	8 -		SETL	5500BC	1	CULT+NONCULT ?
3505	R37-	73		N-3		NAT.DEP.	NONE			WATER	E	FPK	3505	----	3530	3522	8 -		SETL	5500BC	1	NATRL SILT 7-3
3509	R37-	73		1-5							P	FPK	----	----	----	----	7 4 -	7 6 E	DOMS	5000BC	1	MIXED 7-3
3521	R37-	73		10		UNDIF.FILL	NONE			HARD	E	FPK	----	----	3514	3520	8 -		SETL	5500BC	1	OCCP.DEBRIS ?
3523	R37-	73		11		UNDIF.FILL	NONE			ASHY.	E	FPK	3514	----	3519	3521	8 -		SETL	5500BC	1	ON SURFACE 7-7
3514	R37-	73		11		UNDIF.FILL	NONE			ASHY	E	FPK	3514	----	3519	3521	8 -		SETL	5500BC	1	OCCP.DEBRIS ?
3519	R37-	73		12		UNDIF.FILL	NONE			ASHY	E	FPK	----	----	3513	3514	8 -		SETL	5500BC	1	OCCP.DEBRIS ?
3513	R37-	73		14		UNDIF.FILL	NONE			SOFT	E	FPK	3513	----	3525	3519	8 -		SETL	5500BC	1	CULTURAL 7-5
3528	R37-	73		14		UNDIF.FILL	NONE			SOFT	E	FPK	3513	----	3525	3519	8 -		SETL	5500BC	1	CULTURAL 7-7
3525	R37-	73		15		NAT.DEP.	NONE			WATER	E	FPK	----	----	3522	3513	8 -		SETL	5500BC	1	NATRL.SILT 7-7
3522	R37-	73		16		NAT.DEP.	NONE			WATER	E	FPK	----	----	3505	3525	8 -		SETL	5500BC	1	WATER DEP. 7-7
3524	R37-	73		17		NAT.DEP.	NONE			WATER	E	FPK	3505	----	3530	3522	8 -		SETL	5500BC	1	NATRL.SILT 7-7
3517	R37-	73		17		NAT.DEP.	NONE			WATER	E	FPK	3505	----	3530	3522	8 -		SETL	5500BC	1	NATRL SILT ?
3530	R37-	73		18		NAT.DEP.	NONE			WATER	E	FPK	----	----	3529	3505	8 -		SETL	5500BC	1	WATER DEP. 7-8
3529	R37-	73		19		NAT.DEP.	NONE			WATER	E	FPK	----	----	3526	3530	8 -		SETL	5500BC	1	FINE SILT 7-7
3526	R37-	73		21		NAT.DEP.	NONE			RUBBLE	E	FPK	----	----	3527	352?	8 -		SETL	5500BC	1	GRAVELS 7-7
3527	R37-	73		22		NAT.DEP.	NONE			WATER	E	FPK	----	----	----	3526	8 -		SETL	5500BC	1	NATRL.SILT 7-8
3504	R37-	73		5A5		FLR.+ABOVE	IN	RM3		SOFT	G	FPK	----	3556	3507	3502	7 4 -		DOMS	5000BC	1	ROOM#A 7-3
3537	R37-	73	1	-5		SURFACE				SOFT	P	FPK	----	3540	3574	----	7 6 E-		DOMS	5000BC	1	SURF.DEP. 7-21
3540	R37-	73	1	-5	-1	MIXED FILL				SOFT	P	FPK	----	3537	3574	----	7 6 E-		SETL	5000BC	1	SURF.DEP. 7-21
3574	R37-	73	1	-1	-1	SURFACE	ASSC			SOFT	P	FPK	----	3573	3569	3537	7 6 E-		SETL	5000BC	1	SURF.DEP. 7-16
3531	R37-	73	1	-1	-2	SURFACE	ASSC			SOFT	P	FPK	----	3573	3543	3537	7 6 E-		SETL	5000BC	1	SURF.SOIL 7-21
3573	R37-	73	1	-1	-3	SURFACE	ASSC			SOFT	P	FPK	----	3531	3570	3537	7 6 E-		SETL	5000BC	1	MXD.W/74 7-18
3569	R37-	73	1	-2		UNDIF.FILL	ASSC			SOFT	F	FPK	----	----	3535	3574	7 6 E-		SETL	5000BC	1	BELOW SUR.7-18
3566	R37-	73	1	-2	-1	ROOM FILL	ASSC			HARD	F	FPK	----	3543	3572	3574	7 6 E-		SETL	5000BC	1	DEBRIS 7-17
3543	R37-	73	1	-2	-2	MIXED FILL	IN	RM3		SOFT	E	FPK	3543	3570	3547	3531	7 6 E-		SETL	5000BC	1	ROOM#2 7-22
3544	R37-	73	1	-2	-2	MIXED FILL	IN	RM3		SOFT	E	FPK	3543	3570	3547	3531	7 6 E-		SETL	5000BC	1	ROOM#2 7-22
3570	R37-	73	1	-2	-3	ROOM FILL	IN	RM3		SOFT	E	FPK	----	3543	3536	3573	7 6 E-		SETL	5000BC	1	ROOM#3+9 7-19
3545	R37-	73	1	-2	-4	LEVELLING	ASSC			RUBBLE	E	FPK	----	3571	3546	3574	7 6 C-	7 6 D	DOMS	5000BC	1	RM#4 FILL 7-21
3547	R37-	73	1	-2	2-2	IM.AB.FLR.	IN	RM3		SFT/BK	E	FPK	----	3546	3565	3543	7 6 D-		DOMS	5000BC	1	ROOM#2 7-22
3536	R37-	73	1	-2	3-1	MIXED FILL	IN	RM3		MIXED	G	FPK	----	3547	3555	3543	7 6 D-		DOMS	5000BC	1	ROOM#3 7-22
3571	R37-	73	1	-3		LEVELLING	ASSC			GEL	E	FPK	----	3545	3567	3566	7 6 C-	7 6 D	DOMS	5000BC	1	RM#1 FILL 7-17
3568	R37-	73	1	-3	-2	ROOM FILL	OUT	??	ALLY	ASHY	E	FPK	----	3572	3532	3566	7 6 D-		DOMS	5000BC	1	ALLEY 7-17
3572	R37-	73	1	-3	-6	ROOM FILL	OUT		ALLY	SOFT	E	FPK	----	3568	3532	3566	7 6 C-	7 6 D	DOMS	5000BC	1	TOP=LVLNG 7-19
3534	R37-	73	1	-3	-7	WALLS	ASSC			SOFT	G	FPK	3502	----	3556	3566	7 5 -	7 6	DOMS	5000BC	1	BTW.WALLS 7-22
3564	R37-	73	1	-3	-8	LEVELLING	ASSC			GEL	G	FPK	----	3572	3550	3566	7 6 D-		DOMS	5000BC	1	LEVELING 7-22
3535	R37-	73	1	-3	-9	LEVELLING	ASSC			SFT/BK	E	FPK	----	3564	----	3573	7 6 D-		DOMS	5000BC	1	=3506 NTH 7-23
3567	R37-	73	1	-4		MIXED FILL	IN	RM3		SOFT	G	FPK	----	3548	3539	3571	7 5 -		DOMS	5000BC	1	ROOM#1 7-19
3539	R37-	73	1	-4	-3	IM.AB.FLR.	IN	RM3		ASHY	E	FPK	----	----	3542	3567	7 5 -		DOMS	5000BC	1	ROOM#1 7-24
3542	R37-	73	1	-4	-4	IM.AB.FLR.	IN	RM3		SOFT	E	FPK	----	----	3533	3539	7 5 -		DOMS	5000BC	1	ROOM#1 7-24
3533	R37-	73	1	-4	-5	LEVELLING	ASSC			GEL	E	FPK	----	----	3533	3542	7 5 -		DOMS	5000BC	1	FDN.LVLNG 7-24
3550	R37-	73	1	-5		ROOM FILL	OUT		ALLY	ASHY	E	FPK	----	3532	3549	3564	7 6 C-		DOMS	5000BC	1	"ROOM#5" 7-23
3532	R37-	73	1	-5	-2	ROOM FILL	OUT		ALLY	ASHY	E	FPK	----	3550	3549	3568	7 6 C-		DOMS	5000BC	1	ALLEY 7-23
3538	R37-	73	1	-6		LEVELLING	ASSC			GEL	E	FPK	----	3571	3548	----	7 6 C-	7 6 D	DOMS	5000BC	1	RM#6 FULL 7-22
3548	R37-	73	1	-7		IM.AB.FLR.	IN	RM3		SOFT	E	FPK	----	3567	----	3538	7 5 -		DOMS	5000BC	1	ROOM#6 7-23
3558	R37-	73	1	-8							F	FPK	----	----	----	----	7 2 -	7 6 C	DOMS	5000BC	1	MIXED:8-25 ?
3549	R37-	73	1	-8		FLR.+ABOVE	OUT		ALLY	ASHY	E	FPK	----	3555	----	3550	7 6 C-		DOMS	5000BC	1	"ROOM#5" 7-24
3546	R37-	73	1	-9		FLR.+ABOVE	IN	RM3		SOFT	G	FPK	----	----	3551	3545	7 5 -		DOMS	5000BC	1	ROOM#4 7-23
3555	R37-	73	1	14		ROOM FILL	ASSC			SOFT	E	FPK	----	----	3552	----	7 6 C-		DOMS	5000BC	1	RM#E AREA 7-29
3552	R37-	73	1	15		LEVELLING	ASSC			BRICK	E	FPK	----	----	----	3555	7 6 A-		DOMS	5000BC	1	RM#E FILL 8-1
3560	R37-	73	1	17		IN FLOORS	OUT		ALLY	ASHY	G	FPK	----	----	----	3535	7 3 -	7 5	DOMS	5000BC	1	114CM THK 7-31
3562	R37-	73	1	18		FLR.+ABOVE	OUT		ALLY	SOFT	E	FPK	3557	----	3563	----	7 5 -		DOMS	5000BC	1	OCC.DEBRS.7-30
3557	R37-	73	1	18		FLR.+ABOVE	OUT		ALLY	SOFT	E	FPK	3557	----	3563	----	7 5 -		DOMS	5000BC	1	OCC.DEBRS.7-29
3556	R37-	73	1	19		IN FLOORS	IN	RM3		MIXED	G	FPK	----	3504	3554	3533	7 4 -		DOMS	5000BC	1	22LRS=R#A 7-31
3563	R37-	73	1	20		FLR.+ABOVE	OUT		ALLY	HARD	E	FPK	----	----	3561	3557	7 5 -		DOMS	5000BC	1	ALLEY 7-30
3554	R37-	73	1	21		LEVELLING	ASSC			GEL	E	FPK	----	----	----	3556	7 4 -		DOMS	5000BC	1	=3551 LWR.7-31
3559	R37-	73	1	22		IN FLOORS	ASSC			SOFT	G	FPK	----	----	3511	3556	7 3 -		DOMS	5000BC	1	=3507 STH. 8-1
3561	R37-	73	1	23		IN FLOORS	OUT		ALLY	MIXED	G	FPK	----	3551	----	3563	7 4 -		DOMS	5000BC	1	MID=9FLRS.7-31
3551	R37-	73	1	24		MIXED FILL	ASSC			MIXED	G	FPK	----	----	----	3546	7 4 -	7 5	DOMS	5000BC	1	MID.=RM#B 8-1
3553	R37-	73	1	25		FLR.+ABOVE	ASSC			SOFT	E	FPK	----	----	3518	3511	7 2 -		DOMS	5000BC	1	=3515 STH. 8-2
3565	R37-	73	1	26		MIXED FILL	ASSC			MIXED	G	FPK	----	----	----	3547	7 5 -	7 6 C	DOMS	5000BC	1	LOW=ROOM#D ?
3541	R37-	73	1	5-8	-2	FLR.+ABOVE	OUT		ALLY	ASHY	G	FPK	----	----	----	3568	7 6 C-		DOMS	5000BC	1	=3549+50 7-23